Drug & Cosmetic INDUSTRY

AUGUST, 1948

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Here's Why Collapsible Tubes are the *Ideal Container*

STURDY

LIGHT

EASY TO PACK

NO BREAKAGE

ECONOMICAL

New England
SHEFFIELD PROCESS
TUBES

Alert merchandisers, the country over, prefer collapsible tubes . the *ideal container* for products of creamy or soft consistency. Few containers can equal the convenient, economical, and sanitary features of tubes. Their lightness and toughness make them ideal for shipping . . eliminating breakage problems. Consumers like their compact sturdiness, offering ease of packing in anything from travelling bag, to handbag, to medicine chest.

When you specify Collapsible Tubes . . be sure to *specify New England "Sheffield Process"* Tubes. Our exclusive method of melting, mixing and tempering the metals assures *extra* toughness. New England's craftsmanship is particularly noteworthy, assuring fine uniform quality and outstanding tube decoration. You can save time and trouble by ordering *tube cartons* simultaneously with your *New England* Tubes . . both from this one dependable source . . one of our many exclusive services. For products having reaction to tube metal, we offer over 50 *"VINICOTE"* Inner Coatings, each specially designed to effectively overcome chemical reaction of ingredients to tube metal. Get acquainted with New England services now! Write or phone our nearest office for prices, samples, suggestions. No obligation, of course. AND . . ASK FOR A COPY OF THE "NEW ENGLAND" HANDBOOK ON *SHEFFIELD PROCESS* TUBES.

If your tube filling facilities are inadequate, ship us your bulk product. We'll package it for you in tubes, jars, or tins, ready for distribution. This is only ONE of the EXTRA services available at NEW ENGLAND.

NEW ENGLAND COLLAPSIBLE TUBE CO.

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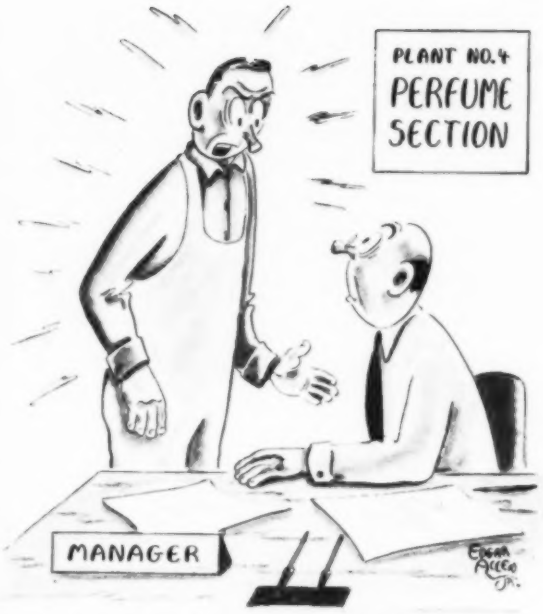
EXPORT DEPT: 500 FIFTH AVE., NEW YORK 18, CABLE "DENTIFRICE", NEW YORK



"At least you could put me on After Shave Lotion so the *Girls* will chase me."

KEEPING POSTED

Basing Points In This Industry

THE basing-point, freight equalization, or delivered-price systems used by many manufacturers, are not likely to be altered in any of the chemicals and raw materials which manufacturers in this industry buy, even though the cement manufacturers have been forced to drop the basing-point system which they formerly employed. Manufacturers of fine and medicinal chemicals feel that there are many other industries manufacturing cheap heavy materials in which the freight is an extremely important factor, which will be acted upon by the Federal Trade Commission long before these makers of fine and medicinal chemicals will have any action taken against them. No action need be taken until a cease and desist order is issued against a manufacturer by the Federal Trade Commission, and even then an appeal can be taken to the courts. However, when the time comes that such an order has to be complied with, it is likely that manufacturers of fine and medicinal chemicals will abandon freight charges altogether and pay the freight upon all deliveries everywhere. As a matter of fact, it is estimated that the highest rate—from the East Coast to the West Coast—is only four and one-half cents, and at the prices at which medicinal chemicals sell, it is felt that all freight charges could, if necessary, be absorbed. However, in the National Lead case, the FTC is attacking the validity of a delivered price system, so such a procedure cannot be certainly predicted until the final outcome of this case is known.

Whatever the FTC is trying to prove by these actions is certainly cock-eyed. We can understand fighting false basing-point systems where basing-points are established in places where customers exist, but where no producing plant exists. And we can understand fighting zoning systems and other systems which might be considered abuses of true basing-point practices established to meet competition. But we cannot get through our heads the principle which the Commission is trying to establish, namely, that unless the shipper gets from the buyer the same amount of money for his goods, exclusive of shipping charges, discrimination exists, and the shipper is guilty of all kinds of unfair monopolistic practices.

Where Pharmacists Are Employed

IN 1946, 85,500 pharmacists, or 90 per cent of the profession, were employed in, or operating the 50,000 drug stores of this country—an average per store of 1.7. About 5,000 pharmacists were employed in wholesale and manufacturing concerns, doing research, supervising production, and supervising packaging. Some 2,500 were employed in the nation's 6,282 hospitals. Unknown numbers were employed as detail men for pharmaceutical manufacturers, taught in pharmacy colleges, wrote for pharmaceutical publications, or were employed by state or federal agencies, according to a survey recently made by the Veterans' Administration.

Britain Taxes Trade-Marked Drugs

TRADE-MARKED drugs and pharmaceuticals exported to the United Kingdom will be subject to a tax of 33 ⅓ per cent of the wholesale price payable by the purchaser, under the new United Kingdom Purchase Act which is said to be designed to implement the British socialized medicine program by making it virtually impossible, except through the payment of a high tax, to provide self medication. The only way of avoiding the tax is to export to Britain products composed of one or more of the substances described in the British Pharmacopoeia, the British Pharmaceutical Code, the Formulary, the National War Formulary, or any formulary approved by the Minister of Health. The products must be in containers, and each container must be labeled to show the official name of the substance as used in these official compendia or abbreviations. And even though the products meet all of these requirements, they will be subject to tax if the trademark is used. The law states:

"Except so far as is required or permitted by the preceding provisions, and except so far as is required by virtue of any act (including any act of the Parliament of Northern Ireland), there must not be any writing or any trade-mark as defined in the Trade-Marks Act of 1938, in the get-up of the goods or on the goods, apart from any get-up.

"Liability to tax is incurred if any particulars . . . appear on the preparation itself, on anything packed with it, or on any container or its label, unless the additional particulars are required to be shown under other enactments, e. g., the therapeutic substance act, the dangerous drugs act, or the pharmacy and poisons act. Liability to tax is also incurred if trade-marks, whether registered or not, are used."

This action by Britain with regard to trade-marked drug products will give manufacturers in this country some idea what might follow if socialized medicine is introduced in this country.

The Miracle of Middleboro, Mass.

PONCE DE LEON was a specialist compared to Farmer Brown of Middleboro, Mass. Brown has been whipping up a batch of perforated impregnated cakes called "master cells" with which he treats water. He claims that water so treated will not only extend man's life expectancy to the age of 120 years, but also will keep his love-life apace. He claims too that this miraculous elixir will cause hens to lay in abundance, cure malaria, and completely stamp out the curse of alcoholism. The farmers up Brown's way swear by his claims so far as chickens are concerned, but the U.S. Department of Agriculture is testing the elixir's qualities with raised eyebrows and tongue in cheek. Farmer Brown meanwhile has crowded his town, to the consternation of the village fathers, and the Post Office works overtime handling his mail. Brown dispenses his wares only for chickens and stock, saying, "If people drink water from my master cell when I give it to them for their farms, it's no fault of mine." There is just a little technicality that might present a market-problem for his discovery. Most people prefer a degree rather than a record for the dispensers of their panaceas.

U. S. P. Looks to 1950

THE U. S. Pharmacopoeia Board of Trustees is developing plans for the 1950 Pharmacopoeia Convention to be held in Washington's Hotel Statler, May 8, 9, 10, 1950. The convention itself will convene on Tuesday, May 9, completing its work on Wednesday, May 10, while Monday, May 8, will be reserved for a pre-convention scientific meeting for presentation of papers pertinent to U. S. P. revision problems. U. S. P. By-laws now require that nominations for membership on the Revision Committee be made by a Nominating Committee which functions for at least a year before the Convention. The Nominating Committee will consist of the chairmen of the 15 current Subcommittees, together with two medical members and two pharmaceutical members of the Pharmacopoeial Convention selected by the Board of Trustees, and who are not members of the Revision Committee, Board of Trustees, or officers of the Convention. The Secretary of the Convention serves as Secretary of the Nominating Committee. At a recent meeting the Board appointed Dr. A. H. Aaron of Buffalo, and Dr. Allen H. Bunce of Atlanta as the added medical members of the Nominating Committee, and Dr. Charles H. Rogers of Minneapolis, and Carson P. Frailey of Washington as special pharmaceutical members. At the 1940 Convention, these appointees represented, respectively, University of Buffalo Medical School, Georgia Medical Association, American Drug Manufacturers Association. The Committee will hold an initial meeting soon to make plans for obtaining names of persons qualified to be considered as nominees on the Revision Committee.

Advertising Found Reliable

IN ONE year, 1,054,352 advertisements were studied by the Federal Trade Commission, and of these, 1299, or 0.12 per cent were given legal consideration. Strikes us that advertising as a whole is quite reliable.

Wide Vitamin Expansion Forecast

A NEW export market for vitamins, equal to the present total world market, is being built up by distribution of these products through Government and private relief activities, according to J. David Hayden, Gelatin Products. The vitamin field, which has expanded six-fold during the past ten years, is now entering a period of greater expansion. As a measure of future growth, Gelatin Products plans to raise its output by 20 per cent during the next year. The present market is chiefly in this country and Great Britain, says Mr. Hayden, who claims that while vitamins were well established in many European countries before the war, their inclusion in Government and private food shipments are introducing their regular use for the first time. Domestically, the upturn is being stimulated by new discoveries and the flow of new knowledge to physicians.

A Fortune for Artificial Tan

STRESSING the dangers of long exposure to the sun to acquire the tan color desired by so many people, J. C. Furnas, writing in the July 31st issue of the Saturday Evening Post says:

"Bathing beaches, suntan preparations and dark glasses are all good commercial propositions which owe their success to the sun cult. But one crying need is still to be satisfied: A fortune awaits the man who invents a harmless substance to dye the customer the color of cigarette tobacco all over. It won't be easy. For years, skin doctors have sought something to repair the appearance of patients with splotched skins—a preparation that will fill in light areas, do no damage, look natural and last. Diluted walnut juice and potassium permanganate, sometimes satisfactory, wear away in a week or ten days. But somewhere in nature the answer probably exists, the market is ready. It takes time and bother to acquire a real tan."

Here's a suggestion for manufacturers to go to work on. According to Mr. Furnas, a fortune awaits the promotor of such an article.

Collapsible Tube Pioneer

FRIENDS and business associates of L. Tracy and W. Kyle Sheffield, president and vice-president of the New England Collapsible Tube Company, read with interest an article, Why We Brush Our Teeth, in July Readers' Digest. The article, describing the first dentifrices in this country—liquid, powder, and paste form—told how their father, L. Tracy, Sheffield, introduced the use of collapsible tubes for tooth paste in 1892, an action which revolutionized the dentifrice industry in this country.

Toiletries by G. B. S.

SOAP on the face is *out* so far as George Bernard Shaw is concerned. "Why should any one rub soap on his face?" he asks, "It hurts the eyes, nose and mouth, which all need cleaning. It makes children hate being washed. Sensible women use face creams instead." G. B. S., himself uses neither soap nor cream on his precious pan, describing the cleansing of his hairy map thusly: "I plunge my head into a full basin of cold water, with my eyes open and my ears well under, and shampoo it with my naked palms until it is nearly dry, then I finish it off with a rough towel." —And a comb?

Surgeon General and U. S. Research

THE new Surgeon General of the U. S. Public Health Service, Leonard A. Scheele, M. D., does not have a very high opinion of the work done in this country in fundamental research. In addressing a recent luncheon of the DCAT, Dr. Scheele said:

"The United States has lagged in fundamental research in the medical and related sciences, as well as in other fields. We have depended heavily upon the older and better developed research activities of Europe for the fundamental knowledge upon which are based our brilliant contributions in applied research and development. In the medical and public health fields, for example, it is well to remember that European scientists made the fundamental discoveries which gave us the whole sciences of bacteriology and radiology; and more recently, the sulfa drugs, DDT, and penicillin. The fundamental discoveries of Einstein, Fermi, Bohr, Meitner, and other physicists, laid the foundations not only for the atom bomb, but—I think more importantly—for the revolutionary investigations now going forward in the medical uses for the products of nuclear fission."

F. T. C. Objects to "Bonus" Goods

THE Federal Trade Commission is now objecting to the expression "bonus goods" in instances where this term is being used in an offer requiring the purchase of something in order to receive something else at no additional charge. Manufacturers in this industry who were ordered by the Commission to stop use of the word "free" to describe such offers are now facing possible deletion of the word "bonus" also. We fail to understand this attitude on the part of the Commission since as far as we can see it describes such offers perfectly. However, we doubt that we will ever be able to follow the minds of the Commissioners around the corners which they travel at such a rapid rate.

F. T. C. Is All-Powerful—Mason

FEDERAL Trade Commissioner Lowell B. Mason recently stated: "The Federal Trade Commission is all-powerful. The Commission under the present laws could issue a complaint against virtually any business in the country, regardless of whether it was violating a law. If we had the money, we could obtain a cease and desist order against every business man in the United States who is engaged in interstate commerce. The business man has nothing to say. He can only hope the law of averages will keep him off the wrong end of a complaint."

How do you like them apples? Here is a man in authority, who knows whereof he speaks, and with recent decision of the U. S. Supreme Court to back him up, telling the business men of this country just where they get off under the present set-up. Mr. Mason said that when a complaint is filed against a company, the company is considered until it proves itself innocent, but the Commission will not tell company officials ahead of time whether or not a contemplated practice is "unfair." "The fair trade laws are determined by litigation," he said, "If a company cannot find an earlier FTC or court ruling covering a situation similar to its own, it just has to take a chance in its operations and see what the Commission decides to do about it."

If a frank statement of this kind does not move the business men of this country to obtain legislative relief from this sort of bureaucratic tyranny, the future of business in this country will be dark indeed.

Toni To Spend Heavily for Research

WE note with interest that the Toni Company, wholly owned subsidiary of Gillette Safety Razor Company, and makers of home permanent wave kits and shampoo, has expanded its research budget to $300,000 "to acquire the greatest body of knowledge ever compiled on the human hair and human skin." The major research is to be carried out at Toni's laboratories in Chicago and St. Paul, while research grants totaling more than $50,000 this year for special studies of the pharmacological and dermatological properties of chemical materials used in various cosmetic products have been made to New York University College of Medicine and other institutions.

Applications for patents which, if granted, might place the home permanent wave business under the control of one owner of one patent, are still pending. No doubt, in its research, Toni will try and find new materials not included in any of the pending patent applications.

Marketing and Use Habits of Cosmetics

COMMITTEE on the Use and Marketing of Perfume Products is the title of a new organization created to make "a thorough study and survey of the use of perfumed products." The scope of the survey includes marketing and merchandising of perfumes, colognes, toilet waters, sachets and other scented products, as well as use habits and psychological reactions of consumers and buyers. The purpose is the development of "a definite program of education in the proper use and appreciation of scented products." Committee chairman is J. S. Wiedhopf, Parfums Ciro, Inc.; and secretary-treasurer is S. L. Mayham, Toilet Goods Association executive vice-president. Other committee members are: H. L. Brooks, Alexandra de Markoff; Norman F. Dahl, Bourjois, Inc.; Jean Despres, Coty, Inc.; B. d'Escayrac, Guerlain, Inc.; Pierre Harang, Houbigant Sales Corporation; Robert P. Johns, Elizabeth Arden; Samuel Rubin, Faberge, Inc.; Paul Russell, Lucien Lelong, Inc.; H. Gregory Thomas, Chanel, Inc.

Botanicals and Medicine

"A HOST of botanical preparations are fast disappearing from modern medicine," said Dr. I. W. Grotte, of Chattanooga, recently. "Deletions in each succeeding edition of the official compendia measure this disappearance. It has become popular among authors of medical, pharmaceutical, and pharmacological texts to regard ancient and traditional remedies, particularly botanicals, as naive and absurd. Some of this has been justified after investigation, but many have been condemned without careful consideration.

"The trend is toward synthetics which have a specific pharmacological action. This is commendable from the standpoint of economy, accuracy, and effectiveness. However, we sometimes sacrifice the diversification and synergism with which a generous nature has endowed her products. Thiamine, riboflavin, pantothenic acid, niacin, are all specific tools of the clinician, but do not supply the balance of the whole B-complex. Without thorough study, one cannot dismiss as worthless drugs which have had a long empiric and effective use. If science had always done so, we would not now have digitalis, vitamins, small pox vaccine, insulin, and a whole host of remedies which have lightened and lengthened the lives of humans."

Foreign Markets Take

MEDICINAL and pharmaceutical exports during April totaled $16,891,194, an increase of 8 per cent over March shipments, and 9 per cent over April 1947 exports. Antibiotics, fish oils and concentrates combined, made up 53 per cent of the dollar value. Antibiotics totaled $6,811,076, and vitamins $2,205,506.

Tooth Decay Again

THAT time-worn subject of tooth decay and diet was discussed last month in the Journal of the A.M.A. by Dr. Nils P. Larson of Honolulu, and the discussion leaves the subject just where it has always been—up in the air. Samples of Dr. Larson's conclusion are:

Conditions producing good general health were found to be associated with severe tooth decay, and conversely, poor health was associated with excellent teeth.

Heavy carbohydrate eaters (Polynesians on taro) had excellent teeth, and heavy carbohydrate eaters (Orientals on rice) had extremely poor teeth.

Hawaiian waters are low in fluorine; sea foods are high in fluorine and can affect teeth. Hence, people in areas with water low in fluorine may have good teeth with high fluorine content.

The funny thing about the studies constantly being made on causes of tooth troubles is that the dental profession goes right on pulling them out and replacing them with false ones. And the average individual seems to view the whole problem with the same resignation as one views the problem of baldness.

Warning—Hangover Under Construction

A CERTAIN group is attempting to encourage the Food and Drug Administration to require warnings on the labeling of whiskey. The warning would caution against the use of whiskey on an empty stomach, and would further caution against immoderate drinking. It would also state that the product is habit-forming, intoxicating, will cause neuralgia, paralysis, and mental derangements (medical terms for hangovers of varying degrees). The spokesman for the group says that if the FDA and other agencies require warnings in the labeling of drugs, they could not exempt whiskey.

Few people realize that the FDA has control over the labeling of whiskey—but it is included in the U.S.P. and therefore comes within the scope of the Food, Drug, and Cosmetic Act. Well do we remember when Spiritus Frumenti (whiskey to you) was put back in the Pharmacopoeia during prohibition—as some wags said, so as the doctors could get their supplies of the real stuff. We were then told in all seriousness that the Food and Drug Administration was responsible for every bottle of substandard liquor that was sold. The Prohibition Department was charged with stopping the sale of all liquor, good or bad, which was not sold on prescription, and they were quite active even though they failed in doing their job. But we never heard of the FDA taking any action against the enormous quantities of "ratgut" that found its way down people's gullets.

British Cosmetic Readjustment

A READJUSTMENT in sales of cosmetics, felt by manufacturers in this country since the first of the year, is now being felt in Britain by manufacturers there. Production increases have brought larger quantities of better known and established brands on the market and buyers are ignoring the less popular brands which were developed to exploit wartime demand. These wartime brands are finding survival difficult in the face of adequate supplies of the better-known brands. British people are spending less money on perfumes.

Vitamin E and Farm Animals

FARMERS and raisers of live stock are not to be defrauded if the Food and Drug Administration can help it. The FDA is taking note of the marketing of vitamin E preparations labeled as correcting live stock breeding trouble, and a criminal action is being brought against a manufacturer in this field. FDA officials claim that, according to the latest information, vitamin E has no bearing on the reproductivity of farm animals, though early experiments showed that it was necessary for normal reproduction of rats. New information, however, shows that it is not required for reproduction of cattle, hogs, chickens, horses, and other farm animals. Officials state that manufacturers of wheat germ are aware of these facts and that some of them have altered their labeling to conform to the newest information. Under such conditions there will be no prosecution. Ordinary stock feed is claimed to contain "ample amounts of vitamin E to meet nutritional needs," and that there is no use for farmers to spend money for added vitamin E in the expectation of increasing the fertility of their animals.

Bristol-Myers Ups Prices

THE effect of increased costs has caused Bristol-Myers to at last give way and announce price increases ranging up to 10 per cent on some of its products. After holding the line on prices for over 25 years despite rising costs in raw materials, labor, packaging, advertising, and other cost factors, "the sharp post-war rise in costs and the fact that the trend is still upward, makes it obvious that some adjustments must be made in our prices if we are to maintain the quality of our products and play fair with our stockholders and our employees."

Although the largest price increase is 10 per cent, freight rates increased 47 per cent between 1938 and November 1947, while some raw materials advanced as much as 300 per cent. Trade discounts remain unchanged, so wholesalers and retailers receive the same percentages, but increased amounts of money.

We hate to see the prices of long-established products in this industry advance in price. We had hoped that such a thing would not come to pass, even though all the facts pointed to it. Now that prices of nationally advertised products of this industry have started upward, and the subway ride in New York has gone from a nickel to a dime, we know that inflation is firmly established in this country and that the dollar has seriously depreciated in value.

Food for Thought

PROBABLY very few people have given consideration to the dangers of bites inflicted by humans. It is to be hoped that the occasion for such consideration is rare. Dr. T. R. Van Dellen, however, paints a lurid picture of the consequences of such violence, with the warning that the human species is more deadly than his four legged friends. The reason Dr. Van Dellen gives for this is that when the teeth of a man (or woman, as the case may be) sink violently or playfully into the flesh of an adversary or playmate, the aperture made at the point of entrance seals itself off, leaving in the tissues whatever bacteria the assailant has fallen heir to. Block that impulse!

Atom Splitting on Christmas

COME Christmas, the kids in the family are likely to be playing around with split atoms. Going the frightening chemistry sets one better, a toy manufacturer is going to market an atomic energy outfit for children next December—complete with samples of uranium ore and how to use it. We hope that a child-size cyclotron which plugs in any electric outlet, is not included in the set which our children get.

FTC Wants More Laws

THE Federal Trade Commission is really thinking up work for itself. It appears that the Commission as now constituted, believes that it is the one agency in the government that should dictate to Congress the laws which are for the good of the country. It has recently told Congress that additional laws are essential to stop the growth of large companies which threaten the freedom of the people of this country. The Commission has painted a grim picture of the results of leaving the Clayton Act unamended. Also the Commission feels very strongly about the freedom which corporations enjoy in the control of patents. The Commission would have Congress amend the patent law to prevent American companies from entering into international cartel agreements, and from denying domestic competitors rights under such patents.

Glass Container Production

GLASS container shipments in June were six per cent below those of May, totaling 7,687,000 gross for June. The decline resulted chiefly from a decline of 31 per cent in shipments of fruit jars; returnable beer bottles, 28 per cent; liquor bottles, 25 per cent; and medicinal and health supply containers, 11 per cent.

Home Waving Market

THE Toni Company reveals that sales of refills for home permanent hair waving, now exceeds that of original complete sets by three to one. Refills contain only the waving lotion while the original kit also contains the curlers. As in safety razors, the big market is in blades, so in home waving, the big market is in the lotion. The refills, which sell for one dollar, might soon meet with price competition as other strong companies, such as Lever Brothers, attempt to make headway in the field. Then there is the question of patents which might arise to completely change the picture.

Drafting of Professional Men Fails

PLANS to draft doctors, dentists, and pharmacists under a separate selective service bill were not enacted by Congress before it adjourned. Bills pending called for induction of these professional men up to the age of 44 for two years service. Induction of younger men would take place first, then those of no previous service, or only brief service in World War II. Separate registration would be set up for physicians, dentists, pharmacists, and allied specialists.

Government Dental Research Program

A DENTAL research program which the Government will back to the extent of $750,000 per year will be set up under a bill which President Truman signed June 24. The $750,000 is to be used for grants to public and private institutions doing dental research. The bill also authorizes $2 million for construction of a building for the National Institute of Dental Research under the U. S. Public Health Service which will administer the program.

Association Seals Proposed

THE District of Columbia Pharmaceutical Association has advanced the idea that the American Drug Manufacturers Association and the American Pharmaceutical Manufacturers Association adopt seals to identify the products of member firms. This is a proposal with many angles. Would all firms in an association use such a seal if it were established? What would be the effect upon other users of such a seal if one user of it was involved in accidental contamination of one or more of his products? How much would such a seal mean to the medical profession, the pharmacy profession, or to the public unless it was backed by a heavy association-sponsored advertising campaign?

Britain Perfumes in Bulk

BRITAIN is being taught to take its perfumes the hard way. Large globes, operating on the beer pump system, are used for retailing stated amounts from bulk storage to customers who bring their own bottles. The idea of the promoters of the globes, each holding a half gallon of perfume, is that the buyer can choose by sampling spray, and then purchase perfume filled into one-quarter ounce bottles at one-fifth the usual price. The bottle can be brought back for refilling. Half ounce and ounce bottles are also available. Prices are 10s per ounce, including tax, for Chypre and Arabesque, and 15s for Suzanne.

Rexall Retail Operations

REXALL showed a loss for the first six months of this year mainly because the company is still engaged in an expensive program to improve its retail operations. Marginally operated stores are being closed and others are being remodeled to give the company a greater number of stores designed for economical operation. The plan is to have fewer stores but bigger and better ones. Two years ago Rexall had 600 stores, but beginning in 1948 the number had been reduced to 495, and this has since been cut to 450. Closing stores is expensive, but according to Rexall President Justin Dart, experience has shown that superstores make aggressive operating techniques possible and more than offset their cost. Drug chain retailing has changed just as chain retailing has changed in other lines.

FIFTY MILLION DOLLARS CAN BE WRONG!

By FRAZER V. SINCLAIR

THERE IS a possibility that $50,000,000 can be wrong. At least some perfumers think so. These men have seen the business in fragrances, that is perfumes, colognes and ,toilet waters, rise from a round figure of $20,000,000 before the war to a peak post-war annual volume of $50,000,000.

During this period of rapidly rising fragrance sales, it looked as if the jury of American opinion, voting with dollar bills, was approving the promotional methods of the perfume industry. It is true that during this time there was some indication that this vote did not express the unanimous opinion of America, because perfume names and perfume advertising became a favorite subject for mockery and sarcasm by the cartoonists and the columnists. Nevertheless, there was no criticism above a whisper within the industry. It would seem as if perfumers had found a golden formula which pushed perfume sales in this country to a peak never before obtained in any country in the world.

Then suddenly the sale of perfume began to fall. This drop was not a stumble in a mild slide, it was not a thank-you-ma'am on a smooth road, it was in fact a sharp skid for a rather bad fall. Of course, there were plenty of reasons to explain this fall, that is reasons which could be interpreted as having nothing to do with the consumer attitude toward fragrances.

Everybody knows that the hilarious joy ride of the previous five years had expanded production to colossal proportions and had brought hundreds of new people, not too well qualified in the art, into the perfume business. They knew, also, that the same thing was happening in leather goods, liquor, movie attendance, gramophone records and in other branches of industry. It was largely a question of retail chaos resulting from an overloaded industry. In fact, there were plenty of arguments available for any one who wanted to argue that there was nothing wrong with the fragrance business that was not equally wrong with every other consumer business that had come into ample supply, and also that there was nothing wrong which time would not correct. But some of the perfumers stubbornly insist that the time has arrived for critical examination.

These men point out that in a wealthy country such as ours, with a high degree of social intercourse and a standard of living never before witnessed anywhere in the world, that even the peak of $50,000,000 for fragrances was not anything too much to boast about. That is because this $50,000,000 for fragrances, if divided among the female white population of this country, in the ages between 15 and 60, meant only a little more than a dollar per capita expenditure for fragrances. These men also insisted that while a magnificent job has been done in the United States in spreading the use of fragrances into every branch of the population, that is, certainly a far higher percentage of women in the United States use fragrances than any other country in the world, the per capita consumption, particularly among the well-to-do women who are the normal users of perfume, is much lower in this country than for instance in France. In other words, a far smaller percentage of

female population in France use perfumes than in America, but those women in France who do use perfume, on the average, use very much more than the well-to-do, socially alert women of America.

Although, this is by no means an unanimous conclusion of the perfumers here, at least there has been agreement among them that the time has arrived for a critical analysis of the reasons why American women use fragrances. On this basis, a group of the leading perfumers have appropriated a sum of money which will be used to employ The Psychological Corporation to determine, through an extensive survey, the predominant impulses in the minds of American women which make them favor the use of a fragrance.

There have been two broad trends in perfume advertising and in perfume promotions in this country which will now be put under the critical eye of a practical psychologist. The first of these is the age-old marketing conception that perfume is something very precious. This marketing conception has influenced every single phase of perfume marketing and every single action which has been used to create a personality for a perfume or a perfume company.

The idea that perfume is a rare and precious product can be seen in the exclusive method of distribution used by most perfumers. It can be seen in the method of selling and the way that salesgirls have been trained. It has been evident in the lavish way in which many new perfumes are introduced, and it is most evident in the psychological factors which enter into pricing.

For years it has been a favorite retail promotional devise of perfumers to build up an atmosphere of exclusiveness and preciousness, and to continually feed salesgirls in the preferred retail stores with a stream of factual evidence regarding the rare and precious elements from which a perfume is manufactured. One major company for years maintained a lecturer who visited retail stores to tell the salesgirls about these rare essences, which were gathered from all over the world at the greatest cost and the greatest hazard so that precious perfumes would be available. One of the high-lights in this talk was the story of civet which was procured in the remote vastness of Ethiopia and was so precious that the French government constructed an entire railroad from the inaccessible capital of Ethiopia down to the sea coast in northern Africa, so that civet would be available to the perfumers of the world.

Another major perfume company has maintained a travelling school of perfumes for salesgirls. This school would stop over in a city for two or three days, and again in this course one of the major high-lights was a glowing account of how these rare and precious materials were procured for the perfumer.

The accumulation of many years in presenting this theme has undoubtedly registered on the American public. The almost explosive frenzy with which many men and women reached for perfume during the flush war years is certainly proof of this fact. Innumerable stories of extravagant purchases by defense workers for gifts bear more than ample testimony that perfume had been registered on the public consciousness as something both rare and valuable and as the ideal product which lent itself to an extravagant display of sudden wealth.

The almost uncontrollable energy with which the American G.I. sought out perfume in northern Africa, in Europe, and particularly in France, as the No. 1 gift, to express his sentimental longing for Mother and the girl friend at home,

(*Continued on page 265*)

ILLUSTRATION BY LESTER RONDEL, COURTESY ABBOTT LABORATORIES

VIBURNUM

By DR. IRVINE W. GROTE
and DR. CHRISTOPHER H. COSTELLO

IN GYNECOLOGY, there are few drugs available that diminish excess muscular activity of the uterus. The ideal specific "uterine sedative" has yet to be found. Those of us who engage in research of this type can little afford, therefore, not to investigate thoroughly drugs which, after a long period of empirical use, are now proving to be effective under the exacting tests of modern science. The Viburnums are such drugs. Ever since their first appearance in scientific literature in 1817, they have been alternately damned and praised as therapeutic agents.

The Viburnums are official in the National Formulary under two titles, *Viburnum opulus* and *Viburnum prunifolium*. The former is the dried bark of *Viburnum opulus*, Linne, var. *americanum* (Fam. *Caprifoleaceae*). The latter, commonly called Black Haw, represents the dried bark of the root or stem of two species, *Viburnum prunifolium*, Linne, and *Viburnum rufidulum*, Rafinesque (Fam. *Caprifoleaceae*). All three are native to the United States. The chief source of *Viburnum prunifolium* is the southern states, particularly North Carolina and Tennessee. The principal states yielding *Viburnum opulus* are Michigan and North Dakota. True Cramp Bark is distinctly a northern shrub and does not occur in a wild state south of the Mason-Dixon line. Both drugs grow wild; and no attempt has been made to cultivate them for medicinal use, since supply seems to be adequate.

Until 1940, reports on the effects of these drugs were conflicting. However, in nearly every case prior to 1940, the material employed was not satisfactorily identified and it has been shown by at least four authorities that adulteration and substitution of the official species of Viburnum were rampant at the time when they received their most unfavorable reports. In fact, the monographs for the drug, particularly *Viburnum opulus*, in official compendia of the period consisted of descriptions of adulterants, in some cases not Viburnums of any species. Since authentic material has become available, several groups of investigators have demonstrated the effectiveness of the Viburnums as uterine sedatives, even when compared with recognized uterine sedative drugs such as papaverine hydrochloride and as a direct antagonist against the stimulant action of posterior pituitary extracts.

From Indian and folk medicine, to the Eclectics, and then to the profession at large, Viburnum first appeared in scientific literature in 1817, wherein an acid, later identified as valeric, was reported in the berries of *Viburnum opulus*. The first extensive chemical study of any species of Viburnum revealed tannic acid, a bitter principle, and an acid resin in *Viburnum opulus*.

The first authentic reference to its use in threatened abortion and miscarriage appears to be that of King in "The American Family Physician," 1855. The writings of King possibly attracted the attention of Goss and Phares, two eminent Southern clinicians, who introduced *Viburnum prunifolium* into their practices and praised it extravagantly to their colleagues. Under the name of Black Haw, it was extensively used in the South in folk medicine to overcome threatened miscarriage as well as criminal abortion induced by drugging with cotton root bark. These reports and others started widespread professional use and clinical investigation of the drug, brought about its frequent appearance in medical and pharmaceutical literature, and eventually led to its acceptance in the United States Pharmacopoeia VII. The fact that seventy-five papers were published during the next decade indicated that the interest in Viburnum was at its highest in this period.

The period from 1910 to 1920 was one of great confusion and conflicting clinical and pharmacological reports regarding the Viburnums. Many reports, conducted in good scientific faith, reveal on critical study that commercial material had been used which had not been identified as authentic. Since during this period adulteration and substitution among the Viburnums were rampant. The description of *Viburnum opulus* in the U.S.P. VIII was actually that of the bark of Mountain Maple, *Acer spicatum*, an inert adulterant, and was reported so by Farwell in 1913. He believed that the true Viburnum barks had not been found on the American drug market for eighteen to twenty years previous to this, and that the indications were that all Cramp Bark investigated by American authors had been the bark of *Acer spicatum*. The possible explanation for this substitution was that after the European supply was exhausted, the American collectors, who were guided by the leaf description only, erroneously gathered the bark of Mountain Maple. In 1917, St. John devised a color test showing that most commercial bark of *Viburnum opulus* and *fluidextracts* were still actually from *Acer spicatum*.

In 1919 when Viehoever and collaborators reported that *Acer spicatam* was still being almost entirely substituted for *Viburnum opulus* and that forty-eight of fifty samples labeled as Cramp Bark were actually *Acer spicatum*. *(Continued on page 268)*

COSMETICS Functions and Formulations

FACIAL MAKE-UP Part I
CAKE MAKE-UP & FACE POWDER

By HARRY HILFER

PERHAPS the most important group of cosmetics to the woman consumer are the make-up preparations whose purpose it is to aid in concealing small defections in the complexion and to further assist by the addition of those coloring tones which are not normally present, but deemed desirable. Any of the facial make-ups must, therefore, have incorporated in it an agency which serves to act as the concealing function, as well as the colors which are also desired. These two properties are necessary parts of any type of make-up preparation whether it be the face powder, cake make-up, creamy make-up or any of the many other preparations being marketed.

In addition to the primary function, the make up preparations may have other functional characteristics which have caused the many different types of preparations to appear on the market. These functions include water repellency, lasting properties of the film, smoothness and ease of application, and the continuity and homogeneity of the film.

RUTH HUSSEY—COURTESY M. G. M.

A discussion of the raw materials used in make up manufacture must therefore begin with the coloring agents that are used. Since the final effects to be provided are predominantly reds and yellows, the most important colors are the various ochers, siennas, and red oxides, all of which are predominantly iron oxides of various degrees of hydration, which are combined with silicates and in many cases diluted with talc. Greyish tones which are also used to detract from the brightness introduced by other colors are provided by the umbers and the ultramarine blues. Lakes (metallic salts of organic dyestuffs) are also used, but not to as large an extent. They are capable of providing brighter and cleaner tones than is possible with the inorganic pigments, and certainly many cosmetic technical men insist that it is not possible to eliminate a tendency towards a greyish cast after application without their use, but their use is troublesome for several reasons. In the first place, they have a high intensity of coloring effect, and therefore, very little need be used to provide a proper shade. However, as a general rule they are not nearly as stable as are the inorganic pigments and they have a tendency toward fading. This fading tendency is accelerated by light, but it is possible for it to take place, though at a slower rate, in total darkness. Other materials present in the make up formulation may also accelerate fading and if the lake or lakes are present in conjunction with other colors which do not fade at an equal rate (which they never do) at the end of perhaps six months there may be a very definite change in the shade as compared to what it was supposed to be. This change is not nearly as noticeable in lipsticks or rouges because of the higher concentration of color present, but in face powders and other make up preparations, where the amount of lake present is perhaps less than 0.1 per cent, it becomes very obvious. For this reason many cosmetic formulations avoid the use of lakes in preparations of this type.

There are two materials in common use as opacifiers, titanium oxide and zinc oxide. Titanium oxide is by

far the superior opacifier, but zinc oxide is still in fairly common use in conjunction with it or by itself, because of some of the properties it possesses and not shared by titanium oxide. The opacity attributed to titanium oxide however is about five times that of zinc oxide, and therefore a smaller quantity of it may be used to produce the same opacity. Zinc oxide has been in use for medicinal purposes as well, and it is because of the anti-acid properties and germicidal effects it possesses that it is still being used in face powders and other make up preparations.

No discussion of raw materials in make up products would be complete without a discussion of talc. Its function in these products is as a filler or diluent into which all the other functional materials may be incorporated. Talc is a hydrated magnesium silicate which lends itself because of its relatively non-crystalline structure to easy grinding to an impalpable powder. The chemical structure of talc varies somewhat with the locale in which it is found, but they may be broken down to two classifications from the standpoint of chemical structure. The French talc is characterized by a lower $Si\ O_2$ content and a higher $Mg\ O$ content as well as the presence of about 10-12 per cent of aluminum oxide, on analysis. Actually all of these compounds are present as silicates and double salts of silica. The domestic talcs, Indian talcs and Italian talcs contain only about 2 per cent of $Al_2\ O_2$, a higher percentage of silica and a lower percentage of magnesium oxide. Physically, the French talc serves to give a duller finish to the final product than do the others. The domestic, Indian and Italian talcs, however, are not necessarily the same in their physical structure, though their chemical structure may be identical. There is a definite difference in particle shape and also the color of the talcs, the color being due to the presence of varying amounts of iron compounds.

Talc serves as an excellent filler in face powder where it may be present in as high a concentration as 80 per cent and as a diluent in other make up items which serves to keep the inorganic powder content at a desired level without affecting the functions of the opacifiers and colors incorporated.

Face powder is the best known of the facial make up materials and is still in good demand. In its formulation the other functional effects which should be introduced, in addition to those of color and opacity, are ease of application and water repellency. Zinc stearate to a certain extent serves both these functions. It is almost impossible to "wet" zinc stearate with water unless it is boiled or aided by the addition of a wetting agent. In addition, zinc stearate possesses a characteristic "slip" which further enhances the finished face powder causing it to feel smoother on application. Chalk is also in common use, because of its fairly low apparent specific gravity, as a filler in addition to the talc when it is desired to use a filler which would cause the finished product to have a lower apparent specific gravity and therefore serve to produce a somewhat lighter film.

Magnesium carbonate is used as a carrier for the perfume oils which are incorporated, since it has a strong tendency towards the adsorption of these compounds. Prior incorporation of the oils in magnesium carbonate serves to make their introduction into the finished face powder easier.

Of equal importance to the formulation is the manufacturing procedure in the face powder. Proper mixing so that the colors and other ingredients may be perfectly homogeneous is best effected by fine grinding so that the materials may then be better dispersed by mechanical mixing. The particle size of the finished face powder has a direct bearing on all of its other properties. The finer the grind up to a point, the greater will be the intensity of the color in the mixture, because of the better possible dispersion. However, below a 10-20 micron range, the particle begins to lose its ability to properly reflect light and, therefore, obviates the primary purpose of fine grinding. In addition, the smaller the particle size, the greater becomes the apparent specific gravity. Any formulation being made will, therefore, depend on the ultimate particle size insofar as the weight of the applied film to the face is concerned.

In the most general practice, grinding is effected by means of a hammer mill or by the use of the air pulverizer, where grinding is effected by a fast stream of air causing collisions between the particles of sufficient force to cause them to be broken down to the desirable size. However, there are still some manufacturers who adhere to the old silk screening method (by use of a 200 mesh screen) because they believe that grinding by collision does not produce as uniformly spherical a particle. This contention, however, is open to argument.

Of more recent vintage in make up preparations was the appearance of the cake make up and the popularity with which it was greeted. The cake make up made it possible for a woman to apply a more continuous film than was possible with face powder. That such a condition was possible could be readily imagined if a comparison were made between the application of a paint as against the spraying of the powdered contents of the paint without its liquid vehicle. No matter how carefully a dry spraying is controlled, the application will be interspersed with empty space, nor would it be possible to have the layer of uniform thickness. A moist application, however, does much to overcome these deficiencies since a layer of uniform thickness and without empty spaces becomes more easily possible. Such a film, though it may border on the point of looking somewhat like a mask, more easily covers defects and has a tendency at the same time of making the result appear more natural because of its homogeneity.

In order to produce a product capable of affording a film with the attributes desired, the usual face powder materials were used, with the exception of the zinc stearate, and the perfume carriers such as the magne-

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PAINTING BY JAN STEEN—DUTCH SCHOOL

BETTMANN ARCHIVE

ALCOHOL IN MEDICINE

By M. A. LESSER

MUCH is said about the evils of alcohol and only rarely is a voice raised in its defense. Far too many people have forgotten, or perhaps never knew that alcohol—even in the form of whiskey or brandy—has many medical uses. Despite the inevitable "witty" remarks that are made when the therapeutic effects of alcohol are discussed, it is very useful as a drug. Alcohol and alcoholic beverages are employed widely for a large number of ailments. Of course, some of these uses are empirical, but most of the newer phases of utility are based on cold, scientific observations.

The medical value of ethyl alcohol was recognized even by those who sponsored the "noble experiment." During Prohibition, Spiritus Frumenti was an important prescription item. As pointed out by Wells,[1] a thing can hardly be called bad if it aids cases of impaired circulation and diseases of the arteries. Whiskey is not an evil thing if it can stimulate the appetite or afford quick, usable energy—both welcome allies to the aged. Nor can one overlook the fact that alcohol, as such, is a valuable antibacterial agent. Its parenteral use during recent years has prevented uncounted hours of misery and pain.

In proper dilution, alcohol is markedly antiseptic. This action is very extensively employed for disinfecting the skin, surgical instruments and hypodermic syringes. Price[2] found that the optimal bactericidal concentration of alcohol is 70 per cent by weight. During the war, in a report on the sterilization of syringes, the British Medical Research-Council[3] advised that where alcohol is used as a disinfectant, the strength should be 70 to 75 per cent by volume.

While effective against vegetative bacteria, alcohol falls down when it comes to spore-forming organisms. The inefficiency of alcohol as a germicidal agent for spore-forming bacteria has been demonstrated repeatedly.[4] Many suggestions have been made for overcoming this deficiency. For example, Fantus[5] recommended a solution of 95 per cent alcohol containing 5 per cent of phenol or thymol as suitable for keeping hypodermic syringes sterile. He also noted that a little of this alcoholic solution could be used for sterilizing the skin prior to injection.

Of course, alcohol is extensively employed to disinfect the skin. Price[2] showed that, in 70 per cent concentration by weight, alcohol is an efficient skin disinfectant, especially when used with gauze friction for two or three minutes. On application of such a solution for about twenty minutes he[6] found that the surface of normal skin was completely sterilized. He used this information as the basis for an effective treatment against the recurrence of furuncles or boils.

In England, Archer[7] made a series of experimental studies on the bactericidal effect of ethyl alcohol solutions, with particular emphasis on skin sterilization. Taking into consideration such factors as skin moisture and atmospheric conditions, he came to the conclusion that, as a general recommendation under all climatic conditions, 80 per cent of alcohol by volume is probably most suitable for skin sterilization. However, such a solution will not be more effective than any other non-persistent agent for dealing with deep-lying resident bacterial flora.

In surgery, alcohol has an established role in the procedure for cleaning the skin of the patient and the operator. Aside from its presence in tincture of green soap, which is often used as the detergent, rinsing with alcohol is an essential part of the preoperative "scrub up."

Alcohol's antibacterial action is not the only property that contributes to its frequent external use. Externally, alcohol is a rubefacient and astringent, and by its evaporation, a refrigerant. Since alcohol causes cooling of the skin by evaporation, alcohol sponges are commonly employed in fevers. This cooling effect is also extensively utilized in the formulation of lotions used in the treatment of various dermatologic conditions. Alcohol's solvent action is also of considerable importance in preparing medicated solutions for topical application.

Because it hardens and cleans the skin and helps to prevent sweating, alcohol is routinely used in bedridden patients to prevent bed-sores and decubitus ulcers.[8] According to Sollmann,[9] the astringent and stimulating action of alcohol, in from 25 to 50 per cent concentration, promotes the healing of ulcers. Alcohol rubbed on the skin produces mild redness and smarting, followed by slight anesthesia. It is therefore useful as a mild rubefacient and counterirritant for the treatment of sprains and other minor pains. Applied by friction or embrocation, alcohol is frequently combined with other mild irritants, as, for instance, in the preparation of soap liniment, camphor spirit and other products.

Alcohol and alcoholic preparations have also proved valuable in treating ear infections. By syringing with diluted alcohol, Schmidt[10] has obtained good results in many cases of acute otitis media. He believes that, in instances of acute inflammation of the middle ear, timely syringing with alcohol has saved many patients from mastoid operations. Others[11] who have used the Schmidt technic obtained similar good results.

According to Fantus,[5] a useful lotion for the later stages of the discharging ear consists of a 4 per cent solution of boric acid in alcohol. This is used on the cotton swabs that are employed for cleaning the ears. A similar preparation is cited by Francke[12] as useful for chronic otitis media and chronic external otitis. In such cases, several drops of the following alcohol-boric acid solution are instilled twice daily:

Boric acid	**2.4 Gm.**
Alcohol	**40.0 cc.**
Distilled water, to make	**60.0 cc.**

A five per cent solution of either salicylic acid or thymol in alcohol may be used in the treatment of otomycosis. Several drops of the solution selected are placed in the ear morning and evening.[12]

Very many medicinal preparations for oral administration contain substantial proportions of alcohol. Here

it may serve as a solvent or vehicle for other medicaments or the alcohol content may provide therapeutic effects of its own. As pointed out by Pittenger,[13] diluted alcohol is the most commonly used extracting agent employed in the production of tinctures, fluid extracts, extracts and the like. In most cases, a mixture of alcohol and water is the best solvent for the extraction of the active constituents of drugs by percolation. By proper adjustment of the alcoholic content of the solvent the therapeutically active ingredients of vegetable drugs can be extracted without dissolving an appreciable amount of inert substances. Because of the high preservative qualities of alcohol, it produces more permanent tinctures and fluid extracts than any other known solvent. Obviously, in many cases alcohol performs manifold functions; for it dissolves, extracts and then preserves the medicinal principles.

There are various types of alcoholic vehicles, the most important being the elixirs. Elixirs may be defined as aromatic sweetened preparations in which medicaments may be dissolved. The modern elixirs are essentially agreeably flavored alcoholic cordials. However, when alcohol is given orally for its own therapeutic effects, it is generally administered in the form of whiskey, brandy or wine.

Much has been written about the physiological effects of orally injected alcohol. Internally, alcohol is a narcotic; excessive doses depress and paralyze the central nervous system. Small quantities produce a general state of well being (euphoria), stimulate respiration reflexly, dilate the cutaneous and splachnic vessels moderately, and modify the circulation. Since it is oxidized in the body, alcohol serves to a restricted extent as a source of energy. Therapeutically alcohol is employed by mouth as a diffusible stimulant, diaphonetic and hypnotic.[14] In small doses it acts as a stimulant in sepsis, shock, collapse, circulatory failure, syncope, sea sickness and persistent vomiting, and after exposure to cold.[13]

In larger quantities alcohol is a depressant of the central nervous system. As explained in a British report,[15] the mildly narcotic action of alcohol is the most important effect from the therapeutic point of view. It may relieve distress and promote sleep, but it is noted that the alcohol must be prescribed with care and judgement. American authorities[8] have pointed out that a hot toddy before bedtime is an old-fashioned remedy for insomnia. It may often produce results where other agents fail, due perhaps to the feeling of well being which is caused by mild cortical depression and freedom from worry.

Many a person has discovered that alcohol eases physical as well as mental pain. Scientific studies have verified this observation. In one recent report,[16] it is mentioned that pain is more satisfactorily relieved with alcohol and aspirin than with many other drugs. The investigations of Wolff, Hardy and Goodell[17] showed that from 30 to 60 cc. of alcohol will produce a somewhat stronger and more rapid analgesic effect than aspirin, with the same type of sedation produced by opiates. The investigators determined that the effectiveness of alcohol in allaying intolerable pain was 40 per cent as compared with 35 per cent effectiveness for aspirin, and that alcohol acted within fifteen minutes.

Of related interest was the discovery that there seems to be a synergism between barbiturates and alcohol. In experimental work, Ramsey and Hoag[18] found that when sodium Seconal was given orally to mice the lethal dose was considerably lowered when alcohol was given at the same time. The anaesthetic dose of sodium Pentothal for dogs was also reduced by previous oral administration of 95 per cent alcohol. Duration of anesthesia resulting from sodium Pentothal injection was greatly increased in the presence of alcohol.

Because it relaxes the nerves, reduces tension and dilates the blood vessels, alcohol has a valuable role in the treatment of certain heart conditions.[19] It is stated by Goodman and Gilman[8] that the administration of alcohol in coronary artery disease to lessen the frequency and severity of anginal attacks is quite valid. Alcohol is one of the few effective coronary vasodilators and is considered the best drug for angina pectoris. "Whiskey and soda," say these pharmacologists, "is perhaps the alcoholic drink of choice for cardiac patients."

Others[20] have stated that alcohol may be of extreme benefit in coronary disease; one or two ounces of whiskey, brandy or rum may give relief from angina pectoris within a few minutes. Ernestine,[21] in discussing the treatment of coronary artery disease, has remarked that occasionally doses of one-half to one ounce of whiskey or brandy with each meal permits an appreciable increase in exercise tolerance.

In a somewhat dissenting report, Stearns and his associates[22] state that therapeutic doses of whiskey do not measurably shorten the duration of attacks of angina pectoris or increase the capacity of the patient with angina for work. It was noted, however, that in many patients with angina pectoris, whiskey may promote an increased sense of well-being without associated objective improvement. A few patients are made subjectively worse.

In the British survey[15] it is noted that alcohol has no practical value as a direct stimulant of the heart in cases of threatened failure. When used in conditions of more protracted cardiac weakness, alcohol has a beneficial action. This is due mainly to its mildly sedative effects; relieving the centers which modify the action of the heart from the disturbing influence of pain and anxiety.

In his discussion of beverage alcohol and heart disease, Helwig[20] expressed the opinion that alcohol by itself is of no significance in the etiology of angina pectoris, essential hypertension, arterio-lonephrosclerosis and coronary sclerosis. He states that there is no clinical or pharmacological evidence that would suggest that alcohol alone ever produces heart disease. Indeed, there is considerable evidence to show that it may have

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Factors in Research

By DR. D. K. KITCHEN, M.D.*

Few research projects are instigated that do not almost immediately present a large number of unforeseen ramifications. Unless direction of the project is adequate, one will find himself expending money and effort in fields far removed from the original purpose of the work and from practicality. Much careful consideration should be given before the concept, which originally led to the work, is side-tracked. Once a clear definition of the problem is obtained, the next is consideration of how to execute the work on the most productive and practical basis. It is obvious that both sales and promotional departments should have a clear understanding of the direction of research efforts at the outset, since in many instances sufficient reasons may exist to render expenditures in a given direction not feasible.

Many factors enter decisions affecting research policy, prominent is the profit picture of the organization. In many ways the most vital time to increase funds for research is at the time of diminishing profits. The decline of sales may be the first sign of obsolescence of products and if such proves to be the case, the company is then forced to secure new products or improve its existing ones if it is to maintain its position in the field. A company enjoying continued growth and adequate profits can afford to spend a higher percentage of its returns in this pursuit than the small organization which for one reason or another is not in the same favorable category.

During the past forty years the discovery of most of our important therapeutic agents have emerged from fundamental, long-ranged and expensive research. No major discovery has resulted in products of practical therapeutic application without the pharmaceutical or chemical industries consummating the latter practical aspects of the investigation and development. Most of the revolutionary medical discoveries such as the arsenicals, insulin, many vitamins, most hormones, the original sulfa drugs, and antibiotics, originated either in universities, hospitals, or private research enterprises, often under industrial subsidy.

Too few realize the time, effort and expense required to produce most of our major therapeutic agents. The principal issue, and the most difficult one, is to decide when, and with what kind of investigation, industry is *justified* in expending the time and funds required for "starting from scratch." An intelligent point of view on this subject requires a careful appraisal of present thinking in all circles concerned with sponsorship of research. This will naturally require inclusion of the attitudes of university and hospital groups, private research agencies, industry and the federal government.

There are those who have denied the logic of the federal government controlling practically any phase of medical research. Others have supported the premise that federal management of medical research is sound, pointing to some of the accomplishments which grew out of the recent war and which were managed by federal agencies created during that emergency. In my opinion, certain fallacies are evident in the arguments offered on both sides of this question. To maintain that practically nothing has emerged from governmental control of certain research projects over a period of years is an unfair appraisal of the situation. Advances in the veterinary sciences alone can be pointed to as worthwhile achievements. The control of bovine tuberculosis as well as anthrax, undulant fever, and tick fever, by the Department of Agriculture is pointed to as an attestment of some degree of return for these expenditures. The application of DDT and phenothiazine are also offered as examples. It has been estimated that two billion dollars have been added to our total farm income as a result of the achievements of subsidized agricultural research.

Proponents of government subsidy point immediately to the accomplishments of the groups created during the war, such as the Office of Scientific Research and Development, National Defense Research Council and the Committee on Medical Research. The radar problem for example was successfully prosecuted and matured by some of these agencies. The coordinated work of several bureaus on the penicillin problem is well known, as is the continued brilliant accomplishments of the industry after the federal coordinators withdrew from the problem. Another example often cited of the logic of government handling of research is that the intensive antimalarial program would not have been possible without such an arrangement. Five and one half million dollars were spent on this project alone by the Office of Scientific Research and Development.

According to Steelman's report to President Truman, the total annual investment for medical research is approximately $110 million for the entire nation, this being only one-tenth of the amount spent for other forms of scientific investigation. Government expenditures in 1947, according to Steelman, amounted to approximately $28 million, representing only 4 per cent

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*Abstracted from paper presented before the American Pharmaceutical Manufacturers Association.

DEODORANTS AND ANTI-PERSPIRANTS

By JOHN R. KOCH and NORMA COCHRAN
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FABRIC damage confined to the underarm sections of garments is, in most cases, traceable to the deteriorating effect of an antiperspirant. The majority of the deodorant compounds and antiperspirants contain an acid salt, such as aluminum sulfate or aluminum chloride, as the astringent component.

Extensive research has been conducted by several laboratories in an attempt to determine the amount of fabric destruction incurred by the antiperspirants, and to find the constituent, or constituents, chiefly responsible for the fabric deterioration.

The Good Housekeeping Bureau Laboratory has published two articles dealing with these problems.[1,2] A procedure of testing cloth for damage caused by deodorant compounds was set up by the above laboratory, under the direction of Ruth R. Bien, and essentially the same method was followed in the present experiments. This procedure calls for experimental conditions which are similiar to those encountered during cloth wearing periods, but the experimental method saves considerable time.

It has been found by numerous testing laboratories that wool and silk cloth are resistant to the action of antiperspirants and deodorants, and that acetates are the least resistant to the action of these compounds. Cotton cloth is attacked by these compounds and the amount of damage is between that of silk and wool and the acetate cloth. The material employed in these tests was cotton broadcloth (white) which was washed, using a mild soap solution at 130°F. for 15 minutes, and pressed with an ordinary flatiron at 425°F. for 10 seconds. From the washed and pressed cloth, strips 3" x 21" were cut, after the removal of an one inch salvage strip. An area, one inch in width, was marked down the center of the length of these strips for the application of the antiperspirant. Ar least 5 such strips were used for each test, thus giving 25 breaks in each case.

A sample of the antiperspirant (2.5 grams) was applied, as evenly as possible and with the minimum of rubbing, to the marked area of each strip. The strips were placed in an oven for a period of 24 hours. The temperature ranged between 36°-41°C. and the relative humidity between 80-85 per cent. A set of controls was also begun and exposed to the identical conditions as the test sets.

At the end of the 24 hour period the strips were pressed at 425°F. for 10 seconds, cream side down on paper toweling. The strips were returned to the oven and conditioned (under the same circumstances) for three hours. Before the last conditioning period the strips were cut up into 3" x 4" pieces, rejecting ½" at each end. The one inch strip to which the antiperspirant was applied then runs across the middle of the pieces parallel to the 4" edge. This one inch area will serve as a guide for the application of the jaws of the testing machine. The strips were broken by the grab test using one inch jaws in the manually operated Perkins tensile tester.

This fabric test was conducted with 5 sample creams and one sample liquid deodorant compound or antiperspirant. A similiar experiment was performed but the cloth samples were thoroughly washed (mild soap solution at 130°F.) at the end of the 24 hour conditioning period and, therefore, before the pressing process. The results are tabulated in the following tables 1 and 2.

TABLE 1

Effects of Ironing Fabric Without Preliminary Washing

Sample No.	*Breakage lbs./sq. in.*	*Elongation in.*	*% Destruction*
Control	25	35	
Cream A	25	32	no loss
Cream B	24	31	4.0
Cream C	9	25	64.0
Cream E	8	19	68.0
Cream F	40	37	no loss
Liquid G	0.4	9	98.4

Conditions: 36°-41°C.; 80-85% Relative Humidity.

TABLE 2

Effects of Ironing Fabric With Preliminary Washing

Sample No.	*Breakage lbs./sq. in.*	*Elongation in.*	*% Destruction*
Control for A-E-F-G	66	41	
Cream A	61	41	no loss
Cream E	52	41	21.2
Cream F	72	44	no loss
Liquid G	55	44	16.7
Control for B-C	36	38	

Cream B	37	37	no loss
Cream C	29	36	19.4

Conditions: 36°-41°C.; 80-85% Relative Humidity.

Table 1 gives the breakage results obtained with cloth samples which have been impregnated with antiperspirant and pressed without washing, i.e. without removing the antiperspirant. It is seen that the antiperspirants do vary considerably as to the amount of fabric damage they incur. Samples A, B and F gave no loss in tensile strength. Samples C and E gave a two-thirds loss in tensile strength. Sample G (liquid preparation) gave complete fabric damage. It was noted that all the fabric samples were badly discolored, especially those cloth samples to which the liquid preparation G had been applied. This discoloration caused by antiperspirants is another important disadvantage of their use.

The results shown in table 2 are interesting. In this set of experiments the samples were laundered before they were pressed. The attempt was made to remove all of the antiperspirant by this laundering before heat was applied.

TABLE 3

Effects of Perspiration Alone on Cotton Fabric

	Breakage lbs./sq. in.	*Elongation in.*	*% Destruction*
Control	66	41	
Synthetic perspiration			
Without preliminary washing	71	42	no loss
With preliminary washing	69	42	no loss

TABLE 4

Effects of Perspiration and Antiperspirant on Cotton Fabric

	Breakage lbs./sq. in.	*Elongation in.*	*% Destruction*
Control	25	35	
Without preliminary washing			
Perspiration plus cream B	30	36	no loss
Perspiration plus cream C	6	22	76.0
Control	66	41	
With preliminary washing			
Perspiration plus cream B	67	42	no loss
Perspiration plus cream C	61	40	no loss

Conditions: 36°-41°C., 80-85% Relative Humidity.

Again, samples A, B and F gave no fabric damage, and samples C, E and G gave one-fifth fabric destruction. These duplicate results are noteworthy. Evidently the application of ironing heat does cause the creams to decompose, possibly into free acids. Since samples C, E and G again gave losses in tensile strength, the cloth was damaged somewhat before the ironing process.

It is realized that it is likely that all of the antiperspirant may not have been removed before the pressing process, but aren't these conditions similiar to those encountered in the ordinary home? The laboratory conditions give the antiperspirants the advantage by far. How many launderies or persons in their home laundry emphasize the thorough washing of clothing sections which have been impregnated with an antiperspirant preparation?

A third experiment was run using synthetic perspiration alone. The fourth experiment employed synthetic perspiration in conjunction with an antiperspirant. Tables 3 and 4 give the results. The synthetic perspiration used for these experiments was made up as follows:

To the following components add enough distilled water to make one liter of solution.

a. 0.18 grams sodium chloride.
b. 0.5 milliliters formic acid.
c. 0.3 milliliters acetic acid.
d. 0.5 milliliters lactic acid.

Table 3 shows the effects of synthetic perspiration alone on fabric. The results (as all the breaking test results) are the averages of 25 breaks. Perspiration alone had no effect whatsoever on the cotton fabric. For fabric safety alone this would indicate that no antiperspirant is better than any.

The question arose as to whether perspiration had some effect on the antiperspirants that it would cause a preparation which had proven to be harmless, to be destructive to cloth. To aid in answering these questions, a set of tests was run using perspiration plus an antiperspirant as the sample to be tested. Antiperspirant samples B and C were chosen to be tested with perspiration because in previous tests one, B, had shown no fabric damage, while the other, C, had shown considerable damage. These experiments were performed with and without preliminary washing of the cloth before the pressing process.

Sample B, as in the previous tests, gave no fabric destruction. Sample C gave results similiar to those it had shown before. If the cloth samples treated with perparation C and perspiration were laundered before pressing them, the fabric damage was small. Those cloth pieces which were pressed without washing were severely damaged. It was indeed encouraging to see that the results were correlating in all tests, for the procedure was proving to be without fault.

(Continued on page 266)

U. S. PUBLIC Health Service Surgeon General Leonard A. Scheele optimistically views the World Health Organization as capable of resolving all medical differences long existing between the many nations of the world. Criticizing the exportation of drug products from this country under present laws, Dr. Scheele says:

"Just laws protect firms from unfair competition in the United States, by unscrupulous operators who are concerned for easy quick profits than for enduring success which accompanies ethical business practice. At present, this legal protection does not cover such firms in the export trade. As a result, the Latin American health authorities have long protested the export to their countries of products which could not have been sold in interstate commerce in the United States. I can tell you that, very recently, at least one Western

DR. LECNARD A. SCHEELE
Surgeon General, U. S. P. H. S.

European country has protested the same practice. Unfortunately, the natural resentment of the medical professions and health authorities abroad, against 'dumping' of substandard products tends to spread and to hurt the firms who wish to supply all their customers with nothing but high quality products.

"The World Health Organization, however, will afford protection to all such firms. The constitution of the World Health Organization (Article 21) gives the Health Assembly authority to adopt regulations concerning the manufacture and advertising of biological, pharmaceutical, and similar products moving in international commerce. The American Medical Association also is active in promoting an International Medical Association and the adoption of international standards for biological, pharmaceutical, and similar products. The Federal Security Agency, through the Public Health Service and the Food and Drug Administration, will collaborate in these efforts. When the member nations have adopted these international standards, there will be no opportunity for the export of substandard drugs and related products."

The peculiar thing about this statement is that the original Food and Drugs Act of 1906, as well as the Food, Drug, and Cosmetic Act which in 1938 replaced the original act, both contain specific protection for foreign countries in the matter of products shipped to them under the laws of this country.

The original Food and Drugs Act contained, and the Food, Drug, and Cosmetic Act now contains definite provisions controlling the quality, labeling, and packaging of goods shipped to foreign countries. The law provides that products exported either must meet the same requirements as required for products shipped in interstate commerce, or must not be in conflict with the laws of the countries to which they are being shipped. This means that if the medical profession of a foreign country desires to use products which it believes are efficacious for certain conditions, it can obtain them

CONTROL OF DR

By THOMAS R. FARRELL

from this country whether the medical profession of this country uses these products or not.

In other words, the law of this country does not, as Dr. Scheele says, allow "dumping" of substandard articles abroad. If foreign countries complain that they have received products which are not in accordance with their requirements, this is not the fault of the law of the United States, but rather is a question of enforcement of the law as it was enacted. We do not doubt for one moment that there are unscrupulous exporters in this country who would attempt to export goods which are definitely below the standards of this country or of the country to which they are being sent. However, it is up to enforcement agencies to uncover and prosecute these exporters under the law as it appears upon the statute books.

Any one who has, even slightly, noticed the trend in this country, knows that the drug and pharmaceutical preparations in favor among a relatively small number of physicians are the ones which are receiving official recognition. In every edition of the U. S. Pharmacopoeia—and these revisions now come every five years instead of ten years—preparations which are still in wide use for very sound reasons, are deleted or dropped

from this foremost official compendium. This is because the Committee on Scope, which committee says what shall, and what shall not, be listed in the U. S. P., is composed of doctors active in clinical use and recognition of the newer products, and also active in the politics of medical circles. The old line doctors, who are constantly treating the sick, see at first hand the excellent results still being obtained with preparations which these other doctors see fit to drop from the Pharmacopoeia as worthless.

If such a condition exists in our country, think of the extent to which it would exist in an international setup. The United States undoubtedly leads the world today in medicine and pharmacy. But this is not to say that we know everything. And from present indications we are trying to tell other countries that we know what is good for them. If these foreign countries want certain types of preparations used very little or not at all here, and labeled in ways different from the labeling required in this country, they should be allowed to have them. Although, since the start of World War II, we have gaineda greatly increased amount of knowledge regarding the needs of the Latin American countries, as well as great knowledge regarding the diseases—mainly tropical diseases—of which our knowledge was

OF DRUG EXPORTS

scanty or nil, we still have a lot to learn. We certainly are not in a position to tell the medical professions and other professions and industries engaged in maintaining the health and saving the lives of inhabitants of all foreign countries, what they shall use and how these products should be prepared and prescribed. Yet that is apparently what many in this country would like to do.

The Food and Drug Administration, while apparently not properly enforcing the export provisions of the Food, Drug, and Cosmetic Act, according to Dr. Scheele's report, has, for some time now been engaged in a program of ruling off the market as not efficacious, certain botanicals which have long been used empirically. This sort of thing is being accepted to a large degree in this country through failure of those interested in preparations containing these ingredients to have research conducted to prove the worth of these drugs. However, there is no valid reason why a foreign country whose medical profession is still using certain drugs with satisfactory results, cannot import these drugs from the United States merely because our latest medical tests do not report upon them at all, or else report on them in an adverse manner. We, in this country, cannot be expected to know all about conditions surrounding the practice of medicine, or about conditions surrounding the health of the natives of all countries of the world.

Then there is the matter of cost of medicinal preparations. It is well known that India, at the price quoted by the Dutch quinine monopoly, could never afford the quantities of quinine required to treat all the malaria in India. For this reason the British Pharmacopoeia has long carried standards for totaquine, a combination of all the alkaloids of cinchona bark, which could be used for the treatment of malaria in India at much lower cost than that of quinine. Regarding totaquine, the British Codex says "it possesses no advantages over quinine except that of cheapness; while the U. S. Dispensatory, 24th Edition, says: "Such a drug has been in use in the Philippines and India for

DR. PAUL B. DUNBAR
U. S. Food and Drug Commissioner

years, . . . and it has been definitely established that totaquine is little if any inferior for this purpose (antimalarial) to the pure alkaloid (quinine)." Despite the fact that totaquine had long been used by other nations for many years prior to World War II, it was not until we got into that war and were desperately short of quinine that we would permit this important drug to be included in our Pharmacopoeia.

There are probably many other drugs which have been empirically used in this country and in foreign countries upon which research similar to the study of totaquine has not been conducted merely because the urgency, such as was created by the war, has not arisen.

(*Continued on page 262*)

WHERE COSMETICS ARE SOLD

By PETER VAUTIN

THERE are no perfume and cosmetic retail stores, of any importance, as there are jewelry stores, hardware stores and grocers. The products of this industry are paying guests—very liberal payers—in a number of different kinds of retail outlets where the primary interest of the retailer is in other kinds of merchandise. Perhaps for this reason, the question so often and so persistently arises: Where are cosmetics sold? What percentage of this business is done in department stores, what part with independent drug stores, with chains and with variety stores? If the question is broadened to take in the full scope of perfume and cosmetic selling to the consumer, we should have to add: And what part by house-to-house selling, by the beauty parlor, the barber shop, the country general store and the food chain or super-market?

There are two reasons why information of this kind is sometimes useful. First, in order to get a relative, over-all picture of consumer shopping preferences, it is important to know how many people shop for perfumes and cosmetics in each of these store classifications. That is, to know the relative number of shoppers in department, chain, drug and variety stores.

The second reason is that this information provides a basis for market selection. These diverse types of retail outlets are a primary reason why the cosmetic industry is split, in the marketing of its products, into so many nearly non-competing groups. The products sold to and through the beauty parlors rarely enter the retail field and the converse to this is true. So also with barber shop products, with house-to-house and to a considerable extent variety stores. Each retail group has a compact group of manufacturer suppliers who have adjusted their package, price, discounts, promotions and advertising to their particular retail needs and these manufacturers are the ones who are favored, often by the exclusion of many products popular in other kinds of retail outlets.

There is plenty of authentic information to show where people buy cosmetics. One very useful source is the consumer panel conducted annually by a number of leading newspapers for their metropolitan trading area.* These show, as an overall picture, shopping preference for perfumes and cosmetics.

	Independent Drug	Chain	Dept. Store	Variety	House to House
Milwaukee	23.8%	12.8%	53.7%	4.7%	3.7%
Philadelphia	44.9	21.	19.6	13.6	.1
Omaha	30.1	12.1	37.8	9.4	8.6
San Jose	36.1	15.6	29.	7.5	7.1
St. Paul	24.6	8.26	51.6	5.5	8.7
Alton, Ill.	51.		14.	17.1	
Aurora, Ill.	54.2		23.2	12.5	
Bloomington, Ill.	43.3		31.3	13.	
Champaign, Ill.	38.7		36.1	9.4	
Decatur, Ill.	35.1		30.9	13.8	
Elgin, Ill.	40.9		43.1	11.4	
Freeport, Ill.	56.3		11.3	18.9	
Joliet, Ill.	50.		27.7	11.5	
Peoria, Ill.	36.8		29.2	10.9	

There are more of these consumer panels, especially in the Illinois group. But these give the overall picture for all cosmetics in markets of various characteristics as to size and geography.

More precise is one of these panels which distinguished between cosmetics and toiletries; i.e., the utilities such as shaving creams and convenience or personal satisfaction products as lipstick.

(Continued on page 258)

ALBERT A. TEETER, Specialist

TWO hundred per cent Bert Teeter wasn't always vice-president of Chas. Pfizer & Co. It only seems like that! His apprenticeship began when he was all of thirteen, as a blacksmith's wiper-offer and big bellows man . . . to the lively tune of one dollar and seventy-five cents a week. His first job was against nature's odds. His income tax then was negligible.

Born in Whitehouse, New Jersey, on September 3, 1888, Bert set out to make the big snow of that year look like a flurry. He has been making deliberate use of his natural talents, his dynamic energy and his bulldog persistency ever since. Intolerant of the weaknesses that assail the flesh, he firmly believes that EVERY-ONE can accomplish whatever he desires, equipped with nothing more than the will, the spirit and the determination. Certainly his own performance leaves little room for doubt.

Back in 1908, fresh from the Columbia University College of Pharmacy, Bert embarked on his colorful business career in the employ of the Oliver & Drake Co., druggists of Elizabeth, New Jersey. He joined the Riker-Hegemann Company in 1913 to become a store manager. Then one fine morning he happened upon a classified ad in the Times, inserted by Mr. John Anderson, Chairman of the Board of Pfizer, offering a position in the sales department to "an energetic young man." Bert followed a hunch and hustled down to Maiden Lane. He got the job, and started his work there in May, 1915.

In that same year, Bert assumed another harmonious life-time contract. He married Agnes Clair Sullivan, of Elizabeth, New Jersey. Two fine boys, Albert and John, and a lovely daughter, Ann, resulted from this union, and through John's courtesy, two granddaughters.

The Teeters are an extraordinary family. From Bert's father, who is ninety-one, on down, they are all busily engaged in the pursuit of some hobby or other. Bert's hobbies are diversified. He has become an expert on several counts. One avocation, however, which preceded all others and still remains his favorite, is his research on short wave radio. He made his first set when radio was no more than a gleam in the eye of industry, a cat's whisker and a crystal. Now his equipment is the envy of the War Department. During the course of his antenna research he has established in his home a laboratory and workshop containing machinery amounting to a king's ransom. Pictures have been published all over the radio-minded world of short wave antennae that Bert has improved and developed. "All you need," he says, is a piece of aluminum pipe and a few tools. First you make your calculations on paper, and the rest is mental relaxation." It is with these simple requisites that he has become recognized as an outstanding figure in the radio field. He is a member of the Radio Society of Great Britain, the International Short-Wave League, The American Radio Relay League, and the Institute of Radio Engineers.

With equal enthusiasm, Bert tackled photography. Back in the days when he travelled as a salesman for Pfizer, he had toyed with the idea of this second hobby.

(*Continued on page 263*)

Doozit . . . does it standing up

Imagine . . . clean, lustrously waxed floors without down-on-the-knees scrubbing. No wonder housewives love it. They simply pour a little wax-rich Bruce Floor Cleaner . . . a few effortless strokes with the long-handled Bruce Doozit do the rest. It's the trouble-free way to floor beauty.

Bruce Floor Cleaner is a product of E. L. Bruce Co., Memphis Tenn.

The E. L. Bruce Co. has made certain of trouble-free sealing by using Crown Screw Caps on this product. These caps are made to the highest standards of precision manufacture for efficient application on production lines. They have the patented Deep Hook Thread that seals more dependably because of the positive "down-pull" action. Liners, too, are precision made. They're full thickness and made of materials that have been especially developed to meet specific sealing requirements. Manufacturers who are looking for trouble-free sealing will find it to their advantage to investigate the merits of Crown Closures. Crown Cork & Seal Co., Baltimore 3, Md. *World's Largest Makers of Metal Closures.*

CROWN CLOSURES

Approved by millions of housewives

PACKAGING and SELLING

ECONOMICS AND THE DEMONSTRATOR

Not many, but an increasing number of manufacturers and retailers are beginning to believe that in the demonstration system they have a tigress by the tail. It is even possible that if a considerable number of these people could see their way clear to do without the demonstrator and to avoid the consequent uncertainties in maintaining their positions, which they fear with a wholesome dread, that they would immediately get rid of the paid demonstrator.

Some retailers are beginning to question the demonstration system, because they know in the bottom of their hearts that some of these demonstrators are occupying floor and counter space which is not nearly as productive of sales and profits as it could be with a free flow of goods sold by a store trained salesgirl, whose first loyalty is to the store and whose objective is a large volume of sales of any merchandise that will move readily at a quick turnover with a profit.

However, the retailer fears losing this juicy revenue in which the manufacturers foot the bill of the salesgirls. In addition to that, he fears that he would lose his priority rights on the products of many prestige manufacturers if the narrow concentration of promotional efforts in retail stores, fostered by the demonstrator, disappeared.

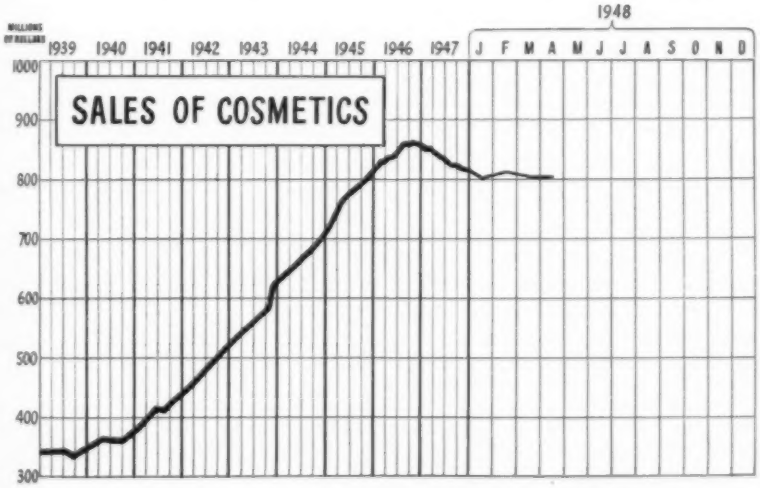
Most manufacturers have been taking it on the chin in a severe way with their demonstrators. Almost generally during this year these manufacturers have maintained their entire demonstration system because they know that before long there will be a reversal of declining manufacturers' sales and that their volume will be restored, so that they can maintain this system, at least somewhat near the relative cost basis of a few years ago.

These manufacturers dread the thought of losing their preferred position in any primary store; a condition which they feel would follow the loss of the demonstrator. Nevertheless, the relation in dollars between the cost of maintaining a demonstrator and the volume of sales of that girl, or better still the net profits which she can produce for the manufacturer, has been an increasingly thin margin and it is doubtful whether the ratio or the spread which existed before the war will ever again be attained.

There are thoroughly strong arguments in favor of the demonstration system for the fashion or prestige manufacturer whose products generally exceed the one dollar price range and who operates in a selected distribution. This is particularly true of make-up products, creams, perfumes and it will be increasingly important in hair products where much educational work must be done. Aside from all questions of the demonstrator's ability, once she is established in a leading store, to contact a highly desirable part of the public, there are other more important reasons why the demonstration system has value.

The manufacturer's demonstrator has been the primary force in building consumer demand for this class of cosmetic. The consumer demand or acceptance built by the demonstrator has undoubtedly greatly exceeded anything that has been accomplished by magazine or newspaper advertising. This consumer demand, built up within the traffic of a great store which may have state-wide or even national trading influence, has pyramided through word-of-mouth recommendations from the direct customers of the demonstrator. This growing clientele of any one girl has spread in time over a considerable consumer area, and since women shop freely in many stores, the entire retail trade of that section has profited by the educational work and the clever selling of the demonstrator in exactly and precisely the way that they have benefited from the circulation of an advertising page in Vogue or Harper's Bazaar in that area.

Nevertheless, a demonstration system has spread certain unsound policies as well as these benefits to the industry. More than any one else, the demonstrator is the direct and indirect cause of the multiplicity and confusion of products of many leading manufactur-



Retail sales of cosmetics for the twelve months ended with May 1948 amounted to $812,874,000. This compares with $806,724,000 for the twelve months ended with April 1948 and with $845,170,000 for the twelve months ended with May 1947.

ers. This conglomeration of products has eliminated the specialization that was once one of the strongest bulwarks of this industry in customer loyalty and respect, and in retail efficiency in selling and in the cost of doing business.

It is natural that the demonstrator of any one house should keep an eagle eye on the sales of any competitor demonstrator and should be very susceptible to department gossip when any one girl is having a whirlwind of sales. These reports go back to the manufacturer in a hot and enthusiastic letter of the kind that only salespeople can write when they spot something easy to sell. The manufacturer, on the other hand, has a continual need for sales stimulation to meet the cost of maintaining a demonstrator and to meet the pressure of a store, on a competitive basis, to hold their demonstration.

As soon as a manufacturer receives several letters from demonstrators about consumer interest in a new type of product, perhaps only with a trivial deviation of formula, use or package, his laboratory is hot on the job to add this product to his line. These reports cause the manufacturers to put on an avid search for new products, new colors, new packages, new anything that will add to his demonstration line, give a spurt in sales, and help keep the demonstrator busy at the cash register. This has resulted in a top heavy accumulation of cosmetic products that has overloaded the retailer, confused the public as to just what that manufacturer is supposed to be and resulted in a mess which is one of the real fundamental troubles with the cosmetic business today.

It certainly has been double trouble for the manufacturer. The biggest tears are being shed by the manufacturer when he relates how universally the merchandise manager and the comptroller have been putting on ice orders which the buyer has made out for the actively selling products in his line. He woefully recites the incredible fact that he is paying the full salary of a girl in a retail store, and that store refuses to buy and does not have in stock certain of his products for which customers are coming up to the girl and demanding and then walking away when the girl is unable to supply it. This is indeed a very woeful situation.

But the retailer has another answer. He agrees that he is losing some sales for "dizzy pink," that lovely new shade for which the manufacturer is creating a demand and for which he has promotions all set up. But the retailer stubbornly insists that he still has a considerable stock of 8 or 10 other shades which he purchased in good faith at the manufacturer's enthusiastic insistence, which sold briefly but which do not now seem to be very interesting to the public. The retailer insidiously suggests that he would be very glad to place an order immediately for "dizzy pink" if in return the manufacturer would take back and credit him with all these other shades that are not selling. When the manufacturer indignantly rejects this silly way of doing business, the retailer stubbornly makes up his mind that before he is going any deeper in his investment in that line, the manufacturer's demonstrator is going to get him out of the hole on his current inventory of of slow movers. To a large extent this situation is now a draw and any decision will certainly be a Pyrrhic Victory.

Under the demonstration system few manufacturers have been able to keep their stock in retail stores clear of sluggard numbers. Retailers know this perfectly well and they know also that this is part of the penalty which they must pay for securing a preferred retail position in that particular line and for having the manufacturer pay the salary of the salesgirl.

But retailers know, too, that there must be a limit to the volume of slow turn-over products which they must finance.

The industry, as it stands now, is thoroughly committed to the demonstration system. In a realistic appraisal of the dollars and cents advantages and disadvantages, a substantial proportion of the retail trade and a substantial number of manufacturers believe that the net balance is in favor of the demonstrator.

But in its obsession in concentrating on these positive values in the demonstration system, it is possible that the industry has not, to a sufficient extent, thoroughly appraised the economics of this old way of doing business. Perhaps, they have not given due weight to the fact that there are certain apparently unavoidable, but persistent results of the demonstration system that in the long run are uneconomic for the manufacturer, the retailer, and the industry.

Christmas Looks Good

June was a good month for many cosmetic manufacturers and for many retailers. Quite a considerable number of manufacturers report sales substantially exceeding the sales of last June, and nearly every manufacturer participated in increased buying to some extent.

The two most depressed fields in the manufacturing industry, that is fragrances and men's toiletries, received a helpful spurt.

Retailers also report increased movement of goods and some, including the large variety chains, entered the market with orders in a way the trade has not seen so far this year. All of this is giving the trade a new feeling of optimism, and they hope the retail inventories and distress merchandise are now getting under control, so that manufacturers can participate in the consumer buying which has not appreciably faltered during all this period.

There is increasing optimism for Fall business, and since this business is the one hope to bring 1948 sales figures up to a really profitable volume, a great deal of energetic action in Christmas packaging is at last getting underway.

Orchids or Perfume

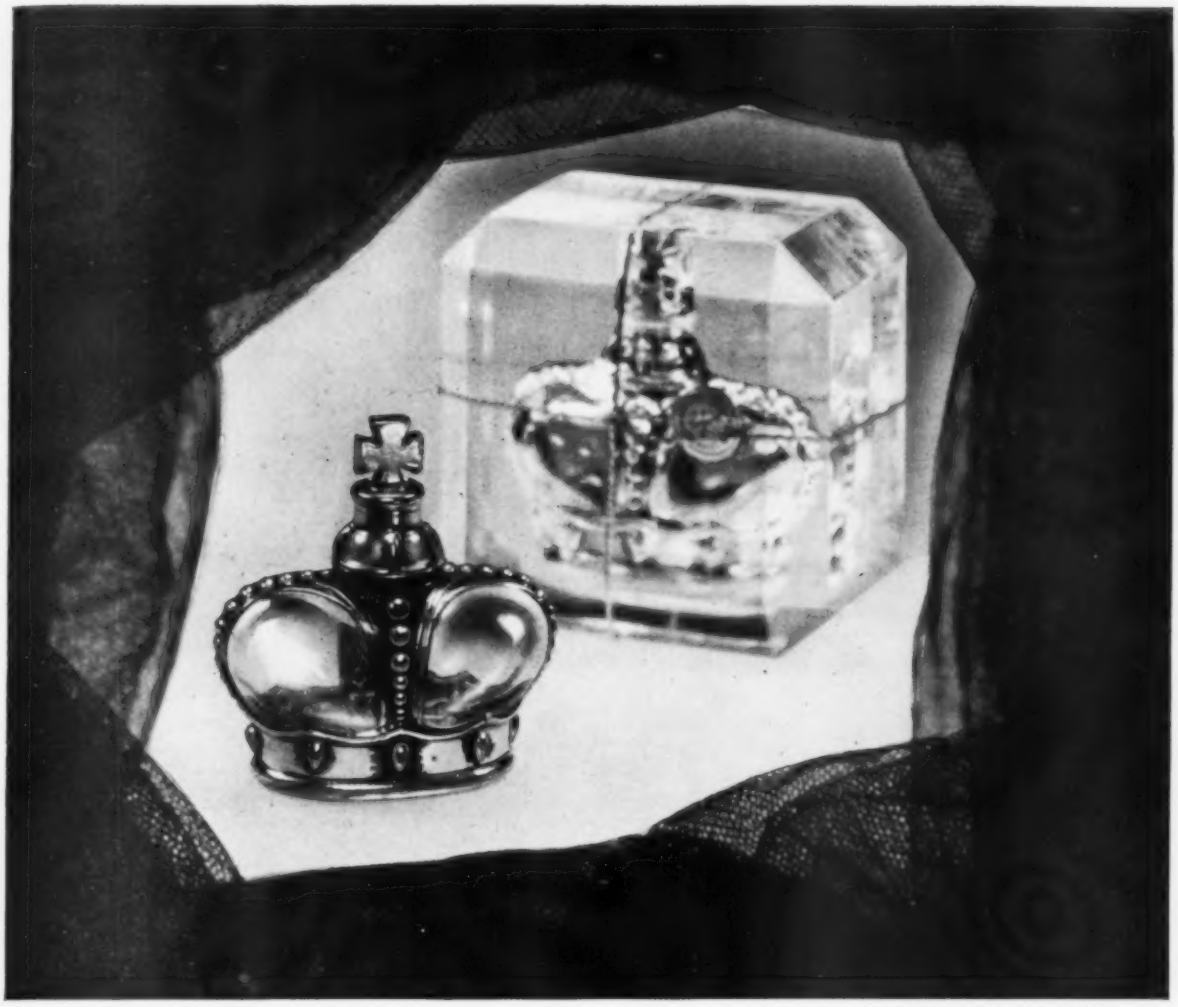
Manufacturers of perfumes, colognes and toilet waters have always vaguely understood that the flower industry is in many ways a direct competitor of their industry. This is shown in the many millions of dollars spent on certain gift occasions, for hospital presents, and in other ways in which a perfume or cologne could just as easily have been the gift as a cluster of flowers.

In the entire floral industry the orchid has been the best merchandised product. The orchid is a pure luxury. Industry reports show that the sale is now down 15 per cent from the spending peak of the war, but also Americans spent $22,000,000 for orchids,—that is three times the amount of just a few years ago. This part of the industry is very actively cross-breeding and turning out new hybrids in all sorts of beautiful blooms.

Transportation and distribution has made the orchid quickly available in practically every community in the United States, and a new system of air transportation makes possible a fresh orchid anywhere in the United States within a relatively few hours, even when delivered from Hawaii.

They All Passed Out

To the perfume and cosmetic business, the cocktail party is a business institution that has completely justified its existence. For the introduction of a new product, a new package, or a new idea,



The flattery of fine glass...

individualized for your product

"CROWN JEWEL" FOR PRINCE MATCHABELLI is a typical example of Kimble's ability to reproduce exquisite creative art in practical containers of universal appeal.

Here is gem-like fine glass . . . precisely matched to the most subtle details of the Prince Matchabelli design.

Here is the flawless result of dozens of Kimble techniques...polished bases and facets, ground stoppers, varied appliqué of metal and color. Kimble craftsmanship in glass containers is unexcelled anywhere in the world.

Such a distinctive package can be your best salesman . . . and quite possibly the least expensive! If your product *is* individual, it can afford to have . . . and *should* have . . . a Kimble individualized glass container.

• • •

Kimble can now produce your private mold containers in any form and quantity, on regular schedule.

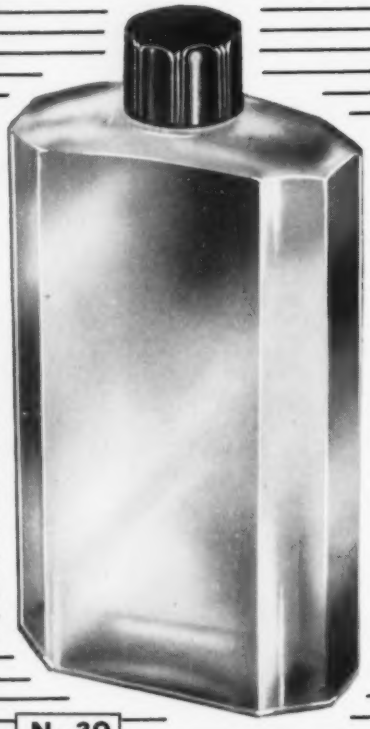
SPECIFY KIMBLE FOR ASSURANCE OF CONTAINER QUALITY

KIMBLE GLASS TOLEDO 1, OHIO

Division of Owens-Illinois Glass Company

FOUR OUTSTANDING STOCK BOTTLES

available in all popular sizes



N-30

P-45

L-33

C-39

Here's the short cut to smart packaging—an artistically designed Swindell stock bottle plus your distinctive label.

Shown here are four of the many stock bottles available for quick delivery in popular sizes ranging from 1/8 ounce to 16 ounces.

SWINDELL BROS., BALTIMORE, MD.
200 FIFTH AVENUE, NEW YORK
ROBERTO ORTIZ, HAVANA, CUBA

When you think of bottles think of

Swindell

the cost of a cocktail party, measured against lines of free publicity, usually is well in the black as an advertising investment.

Sometimes there's a real plus at one of these parties. A leading manufacturer of compact cases recently introduced his new fall line at a large and successful party. At the end of a speech, he remarked to the assembled beauty editors, "One of our beautiful new cases will be handed to each lady as she passes out."

The P.M. Again

This industry may hear a great deal more about the P.M. in the next year or two. Not only is its use increasing aggressively throughout the industry, but for the first time since they received a very vigorous smackdown in a court decision 30 years ago, the Federal Trade Commission has been reaching out in an attempt to throttle this vigorous perennial of point-of-sales marketing in retail stores.

There always have been two mistakes which a manufacturer could make in using the P.M. which would make him a sitting duck for the Federal Trade Commission if they chose to glance in his direction. The first mistake is to give a P.M. to retail sales clerks without the consent or knowledge of the retailer. This is a form of commercial bribery which is very completely covered by a number of states in their penal laws. Also, the Federal Trade Commission undoubtedly has plenty of authority to crack down when this method is employed. Our old friend, "proportionally equal" terms, is of course the other basis which gives a completely confusing but legal basis for action against a system of P.M.'s.

It is perfectly possible, of course, for a manufacturer to use in a liberal way a system of P.M.'s, and to remain perfectly in the clear on these two points. This would seem to any normal business man to relieve him of any legal or moral responsibility, in developing an incentive system for the retail clerk, which he administers in the open and in full view of everyone, with the retailer's consent, and on proportionally equal terms. Apparently, however, the Federal Trade Commission does not feel this way. They have been licking their wounds for 30 years and casting sour expressions in the direction of the P.M.

Now they have advanced on the Philco Company with a basis of reasoning that challenges the most distant flight of legal fantasy. Philco had started a sales promotion plan which they called "Sell and Win." In this plan, prizes were offered to the retail sales people, based upon the sale of Philco products. We do not know all the details of this sales promotion plan, but it appears to us a very normal and routine affair of stimulating the activity of retail sales people to take a particular interest, over a given period, in Philco products.

The legal fancy of the Commission contends that a consumer, who is about to purchase a radio in a retail store, has a right to expect expert or at least some kind of informed knowledge regarding radios and, therefore, the consumer must normally expect that the advice of the sales person is competent and unprejudiced. The Commission submits the idea that it is displeasing, immoral and un-American (not in those words of course) to even contemplate the thought that any one selling merchandise in a retail store would tolerate the thought of a sales incentive for certain types of merchandise, but in a grave and pontifical manner would give his expert opinion as to the relative merits of the merchandise in which his boss, the retailer, has invested his money.

For some reason, best known to themselves, the Philco Corporation did not carry this case to court, but accepted a cease and desist order. Since this company must certainly have qualified legal opinion capable of advising them on their own most elementary rights, as well as those of their customers, we can only conclude that Philco has thought of a still better promotional program.

About 30 years ago, the Federal Trade Commission had its fingers chopped off by a manufacturer of bedsprings. This manufacturer had been giving such things as neckties to the retail salesmen whenever they sold a bedspring. This case was taken to court, and we are indebted to the court in this decision for one of the clearest statements on fundamental business principles, in the free enterprise system, on record. Said the court, in effect, without any question the sales clerk, with the master's consent, may discriminate between the master's goods. All of the buying public, including those with the intelligence of a nitwit, knows that the retail salesman represents the interest of the store and the owner. Continually, and on numerous occasions, the owner has many reasons for discriminating among the merchandise in his store and for pushing one product in preference to another. Frequently, the store owner is his own salesman, and it would be reducing retailing to the depth of absurdity to say that this salesman must stop and tell the buyer just what his personal interest is in any product he may be promoting in preference to similar competitive products.

In other words, according to this court, a retail salesman, with retail management's consent, may discriminate all he pleases in the selection of the articles which he prefers to sell to a consumer-customer.

The Federal Trade Commission seems to be leading business deeper and deeper into a land of fantasy, where often the most elementary principles of free selling are challenged on a basis that could only be termed Utopian philosophy.

We are still in a country where a retail store is private business, organized for profit. Let's hope that even a child buying a stick of candy understands that. These retailers must continually have a multiple number of reasons for instructing their sales people to push certain products, and to bend every sales effort to build up preferential sales volume on these products.

Whether the retailer cooperates with a manufacturer, in a sales promotion program developed by the manufacturer, or not, doesn't in the slightest infringe on his own responsibility, as a good business man, to proceed with due prudence and due confidence to make his business profitable.

Package Museum

Whenever a major, or even a minor, package change is in process, many companies must envy Hudnut. This company has an air conditioned room set aside which has been converted into a packaging museum or a packaging archive. In this room, arranged on shelves in sequence, is every Hudnut package which this company has put on the market since the beginning of its business. This means that there are certain packages that predate 1890.

Aside from the wide variety of package forms, color combinations, closures and secondary containers which this display shows and which certainly has value from a clinical viewpoint, that is a comparison of a package and its sales, there is a historical value here in that any package of a long established product must be the evolution of a personality and must to some degree conform to the personality established over many years.

Another cosmetic company that has a large permanent display of packages is Coty. This company not only pre-

BRIDGEPORT

Metal Cosmetic Containers

Caps and Closures

Perfume and cosmetic manufacturers for more than a quarter of a century have recognized the precision craftsmanship of Bridgeport Metal Cosmetic Containers.

The consistent uniformity and beauty of our products has resulted in many leading manufacturers remaining as consistent users of Bridgeport Metal Containers.

When you are again planning a product that requires an original design be sure to examine the fine precision and decorative beauty of Bridgeport Products.

Bridgeport Produces

- Vanities
- Jar Caps
- Bottle Caps
- Lipstick Containers—Swivel, Slide, Automatic
- Dry and Paste Rouge Cases
- Powder Boxes
- Perfume Vial Cases and Caps
- Lip Brushes
- Drawn Talc Containers
- Miscellaneous Make-up Cases and Other Metal Specialties

THE BRIDGEPORT METAL GOODS MFG. CO.

Established in 1909

BRIDGEPORT, CONN.

PHONE: BRIDGEPORT 3-3125

serves its own packages, but has also on display quite a variety of outstanding packages of other companies which show the range and variety of treatment for certain kinds of products in which they are interested.

Timing

A leading cosmetic company recently came up with one of the neatest examples of timing this industry has ever seen. In the June 19 issue of the Journal of the American Medical Association there appeared an advertisement of this company, "A Message to the Medical Profession," which outlined ethical and precise steps which this company uses to pre-test in a clinical way every product before it appears on the market.

In the following June 26 issue of this same publication there appeared an article which rendered a very severe and critical clinical report on one of the products of this company.

Here We Go Again

Paul's Cut Rate Drugs in Detroit advertises that you "Pay Less to Paul's because you do not pay big store overhead and 'Fancy Front' Expenses."

A recent advertisement featured the ADD-A-PENNY SALE. In this sale apparently Fair Trade prices were maintained for leading brands but an extra penny bought a fancy assortment of other products.

For instance, a 50 cent bottle of Phillips Milk of Magnesia sold at 39 cents, Add-A-Penny and get a box of 100 Hinkel's Pills.

Fifty cent Vitalis Hair Tonic sold at 43 cents, Add-A-Penny and get a 25 cent pocket comb.

One Hundred Bayer Aspirin—59 cents, Add-A-Penny and get a pint of rubbing alcohol.

Fifty cent Ipana Tooth Paste at 43 cents, Add-A-Penny and get a pint of mouth wash.

This assortment included over 20 similar offers. Included also was Coty Face Powder at $1.00, Add-A-Penny and get a bar of Swan or Ivory soap. Coty, at least, objected to this Add-A-Penny sale. In their opinion this sale was a violation of fair trade statute of the state of Michigan, and suit was accordingly instituted by Coty, Inc. against Paul and Joseph Deutch, brothers, doing business as Paul's. As the suit was started, counsel for both parties conferred, and the defendants agreed to the entry of an injunction restraining the defendants from violating Coty's Fair Trade Contract in the fashion complained of.

Pan-Stik

Pan-Stik is an new cream type make-up, created by Max Factor Hollywood. In stick form, its container swivels up in the same way that a lipstick does. It is the first container of its kind, in that it is not round, but oval in shape. The stick is designed for improvement in make-up application.

Smart Package

A good example of energetic promotion is in the work that William A. Wright is doing for Jules Montenier. Stopette was launched about a year ago as an underarm deodorant and so far as we know, is the first company to use the thermo-plastic bottle. This package gave Stopette a dramatic news story in its introduction to the trade and because it made such an effective display and proved to be such a novelty to the consumer, distribution in many leading department stores was soon accomplished.

Since that time, in addition to active travelling, Bill Wright has kept up an energetic mail contact with the trade in a way that has certainly paid dividends both in expanding distribution and in retail interest.

Recently this company developed a small four-color carton counter display which was developed for retail drug stores. A carton display of this character has not as a rule appealed to the department store and in fact it has normally taken a great deal of ingenuity, modesty and good taste for any cosmetic manufacturer to get a display of any kind on the department store counter. This particular carton, however, has been accepted by quite a considerable number of department stores including some leading stores in Milwaukee, Pittsburgh, Detroit, St. Louis and Kansas City and other cities.

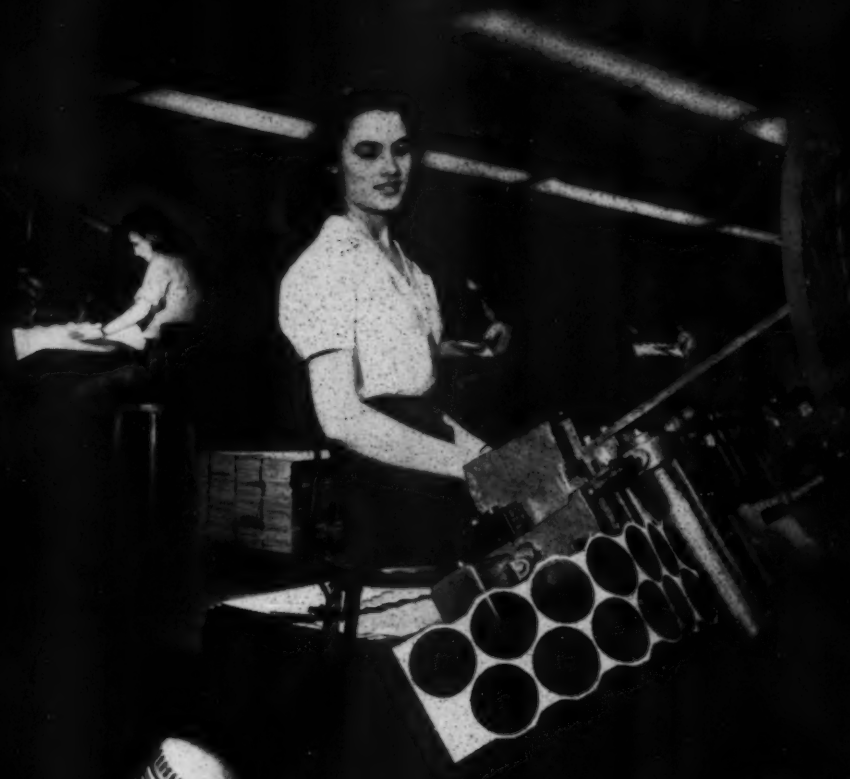
While this company has been a consistent user of national magazines, they have been particularly aggressive in the use of cooperative advertising. Bill Wright writes us that in some cities, Milwaukee, for instance, cooperative advertising space is still at such a premium that even though the advertiser is willing to pay the full cost of the ads, the stores are still cautiously allocating space. Bill's answer to that was to get Gimbel's, Schuster's and the Milwaukee Boston Store to combine their names on the same advertisement which appeared in the Milwaukee Journal, for four succeeding insertions. That certainly covers the title of cooperative advertising and it is one of the few times we know of where an advertiser has been able to persuade competing stores to allow their names jointly on a cooperative ad.

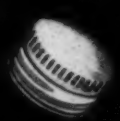
Your Wholesalers Salesman

If your company sells through the wholesale drug store, you should put down as a "must" an invaluable little book called, "Increasing Wholesale Drug Salesmen's Effectiveness." Even if you do not sell through the wholesaler or even if you have nothing to do with the retail druggist, this book should still be compulsory reading. It is the most comprehensive, factual work that we have seen on selling to retailers.

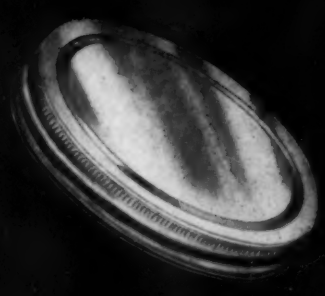
Many influential people in the drug trade cooperated in this study, which was undertaken jointly by the Department of Business Organization and the Bureau of Business Research of the Ohio State University in cooperation with the Committee on Sales Management of the

FACILITIES FOR QUALITY PRODUCTION *





BERNARDIN
Metal Closures



Have you ever seen fine closures made? To go through the Bernardin plant in Evansville is to see for yourself the tremendous resources in men, machines and materials required to make the millions of Bernardin Closures used each year. Bernardin Bottle Cap Company, Evansville, Ind.

Since 1881—America's First Manufacturer of Metal Closures.

* Pictured—High speed automatic presses stamp and form Bernardin Closures with machine-gun rapidity.

National Wholesale Druggists' Association.

You will get a vivid picture of the wholesale druggist salesman in this book, what the retailer thinks about him, his sales ability, the way he uses his time in a retail store, and what the salesman thinks about his own job and the way he should do it.

The average salesman for a wholesaler is about 40 years old and has been selling drugs for 10 years. He is a high school graduate, has spent several years working in the wholesale house and has also worked as a clerk in a retail store. He has a territory which includes about 45 accounts and makes 8 calls per day. From this territory, he gets a sales volume of about $285 thousand yearly, and he earns between $5,000 and $6,000. His relations with his customers are excellent; also, they think that his education is somewhat lacking, an opinion which he shares. He is definitely conscious of the necessity for assisting his customers, but both he and the retailers think he needs training in how to do it. He also thinks he needs training in salesmanship, and both he and the retailers agree that his knowledge of pharmaceuticals and chemicals is somewhat weak—particularly in respect to knowledge of new products and the use of merchandise he is selling.

There has been a constant trend to decrease the number of accounts which the wholesale salesman covers, in the last 20 years, and this trend is increasing. The average wholesale house carries about 15,000 different items. About 1,500 of these are fairly active, and for these products the salesman must know off-hand the cost, sizes, retail prices, number packed in a carton and discount schedules. In addition, he must know the hundreds of deals current at the time and keep abreast of additions and deletions.

More than anything else, the retailer expects the salesman to help him with sales promotions and display; following that he expects a knowledge of stock and prices, and after that a knowledge of the product. Dealers, particularly, want advice on sales promotion activities. They want, nearly as much, to have the salesman educate their sales clerks. Following that they want information of successful promotions by other druggists.

A large part of this book is a detailed, comprehensive study of how a salesman actually employs his time. This can be translated into a very useful study of the manufacturer's selling and promotional efforts through a wholesaler, from the viewpoint of the wholesaler, the wholesaler's salesmen and the retailer. For instance, the over-all sales per minute for all types of selling amounted to $3.67. Suppose a manufacturer has a new product which will take "only five minutes" of the salesman's time. The wholesaler knows that each of his salesmen, averaging 40 accounts, will sell about $734.00 during these five minutes. If the house has 15 salesmen, the sales will total around $11,000. In addition to this, since the salesmen have only about 11 minutes of actual selling time per call, this one promotion would require about half the selling time of the sales force for the one or two weeks required to get complete coverage.

Sales per minute of actual selling time may vary substantially. Here is the way the actual selling time, used by a salesman in a store, works out in terms of sales. Stock checking accounts for 40.9 per cent of the sales; selling from samples, 11.4 per cent of the sales; selling from printed matter, 38.3 per cent of the sales. In other words, selling from samples, or samples and printed matter, substantially increased the number of sales closed on presentation.

This study which extended over a year, and included traveling with 70 salesmen of nine wholesale firms, during which time these salesmen must have felt like a bug in a microscope, was made primarily to study ways and means of improving wholesale selling.

The book is called, "Increasing Wholesale Drug Salesmen's Effectiveness," by James H. Davis, Ph.D., and is published by the Bureau of Business Research, College of Commerce and Administration, The Ohio State University, Columbus, Ohio.

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing sales for the month of May 1948 as compared with the same period in 1947.

	Department Stores	*Drug Stores*		*Department Stores*	*Drug Stores*
Atlanta	+4	–5	Los Angeles	–4	–7
Baltimore	–5	–3	Salt Lake City	+6	0
Birmingham	+6	–4	Milwaukee	+4	+4
Boston	+1	+1	Newark	+4	+1
Chicago	–5	–1	New York	0	0
Cincinnati	+1	–1	Philadelphia	+5	–4
Cleveland	0	–3	Pittsburgh	+4	+3
Dallas	+3	–3	Providence	–3	–3
Detroit	–1	+2	St. Louis	+1	+1
Indianapolis	–1	–1	San Francisco	+3	–9
Kansas City	+6	+4	Seattle	–2	–1

Advertising Memos

"Pretty Quiks" are absorbent, pure linen rag tissues designed as a beauty aid to blot up excess facial oils without disturbing make-up. Not to be used as a disposable handkerchief or make-up remover, their sole purpose is to erase oily shine from the face. Come in boxes of three hundred. Price $1 dollar, no tax.

Celluplastic Corporation in introducing its "Clearsite" plastic vials announces that they are now available in rigid polystyrene and flexible polyethylene in a complete range of stock sizes. Diameters of "Clearsite" vials range from ⅜ of an inch to 1¾ inches.

The vials that lend themselves to so many uses in efficient packaging of drugs and cosmetics will provide great savings in shipping, bulk packing and breakage since they are seventy to seventy-five per cent lighter than glass. Also of prime interest to manufacturers are "Clearsite" eye appeal, product protection and sales building display value.

Aside from the vials. Jars, boxes, capsules and other containers and specialties are aslo producted by Celluplastic in all thermoplastics, all of which are produced not only in stock sizes, but in special sizes and shapes to order.

The "squeezable" polyethylene vials have been received with open arms by many cosmetic and drug manufacturers, and their acceptance is growing rapidly since they lend themselves to so many uses plus ease of volume production, have uniformity in size, shape and threading, thus assuring a package of high uniformity.

Peaks of achievement...

YOU will achieve dependable product protection when you seal your products with the scientifically designed Anchor C.T. Cap. Its deep-rolled thread readily engages the underside of the glass thread and exerts a firm, even sealing pressure on the liner around the complete circumference of the container finish. This assures a dependable airtight and leakproof seal. Its broadly rounded thread allows ample clearance —eliminates wedging and jamming—permits smooth spin-on-and-off action. This, plus positive knurling of the skirt makes for ease of removal and reseal.

MT. EVEREST—the highest mountain in the world. Anyone successful in climbing it would indeed reach the Peak of Achievement.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS
CORPORATION
LANCASTER, OHIO

IT'S *Anchor C.T. Caps*
FOR THE PEAK OF ACHIEVEMENT

It's *Glass* for eye appeal...

ANCHORGLASS containers are designed for maximum eye appeal. And with eye appeal that makes selling easier, Anchorglass containers have all the other requirements of the ideal package. They are essentially inert —add nothing, take away nothing from your products. The purity, strength and other qualities that characterize your products are always protected—until they are entirely used. Consumers are not only attracted to Anchorglass packed products—they also appreciate the easy, safe and quick access to contents, ease of resealing, and the visual inventory that tells when to reorder.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS
CORPORATION
LANCASTER, OHIO

AND IT'S *Anchorglass*
FOR MAXIMUM EYE APPEAL

NEW PERFECTION

½ OUNCE 2 CC.

(actual sizes)

Miniature

DROPPING OUTFITS

for

- Samples
- Demonstrations
- Direct Mail Advertising

For Effective and Economical Demonstration of Your Regular Size Package

Here's a sales and advertising aid you'll find invaluable — a miniature NEW PERFECTION dropping outfit in the same style in which you sell your regular size package, complete in every detail. It's ideal for sample distribution, salesman demonstration and direct mail advertising, putting your product before the customer in a convenient and attractive, yet economical form.

These miniature dropping outfits are made with the same skill and cleanliness which characterizes all NEW PERFECTION products. Sizes are 2cc. and ½ ounce, and bottles are available in Amber, Blue, Green or Clear glass. Dropper glasses can be supplied in various styles. Our AMEKINE oil-resisting bulbs are made especially for use with oil products, or you can specify natural rubber bulbs for non-oily preparations.

THESE SMALL SIZES ARE ALSO IDEAL FOR HIGH-POTENCY PRODUCTS WHICH ARE DISPENSED IN SMALL QUANTITIES.

The regular ¼, ½, 1 and 2 ounce sizes can also be furnished or we can supply the dropping parts to fit your bottles.

Write for Samples and Quotations

PENNSYLVANIA GLASS PRODUCTS CO. INC.

"GLASS GOODS OF THE BETTER KIND"

428-432 NORTH CRAIG STREET . . . PITTSBURGH (13), PA., U. S. A.

STRATEGIC PLANT LOCATIONS

make ROBERT GAIR your next-door neighbor

Gair Plants are strategically located to render maximum service . . . a CONTAINER SERVICE that is almost equivalent to having a GAIR PLANT in "YOUR OWN BACK YARD."

Expanding beyond shipping facilities, the ROBERT GAIR organization provides technical cooperation. At each plant, service engineers are available to help solve problems of designing or redesigning your present containers, or in the creation of new containers for new products.

These packaging engineers are prepared to advise on proper methods of sealing containers, either by hand or by machine. This technical information is invaluable where interior packing has been designed to protect fragile or valuable merchandise.

Furthermore, these GAIR REPRESENTATIVES know the relative merits of corrugated, solid fibre, jute and Kraft.

This GAIRanteed service is available for the asking.

Write for your Free Copy of

1. Sealing of Corrugated and Solid Fibre Containers, *or*
2. Container Handbook.

ROBERT GAIR COMPANY, INC.

NEW YORK • TORONTO

PAPERBOARD • FOLDING CARTONS

SHIPPING CONTAINERS

A Classic Cap Makes a Classical Package

By topping your package with an Armstrong's C-Design Molded Cap you transform it from "just another package" to a fresh, distinctive, outstanding package with buy-appeal. The C-Design Cap combines sturdiness and lightness with the simplicity of a smooth, round skirt. Highly adaptable to all types of packages . . . available in all standard sizes . . . exceptionally economical to use.

For further information and prices, address Armstrong Cork Company, Glass and Closure Division, 1908 Prince Street, Lancaster, Pa.

ARMSTRONG'S
Artmold
PLASTIC
CAPS

SHOPPERS SEE IT SOONER—BUY IT FASTER

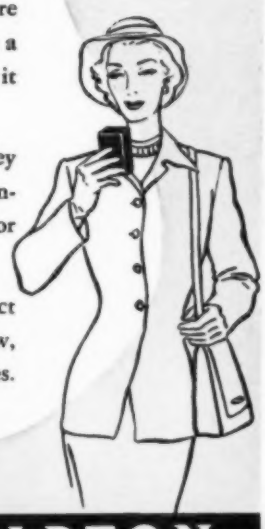
Laminated foil cartons reflect light, call attention to themselves on retail shelves and counters, have rich, high-quality look.

When Your Product's in a Carton by UNITED!

If you want more *impulse* sales . . . greater volume . . . increased profits . . . package your product in a carton by United! For United cartons—both the regular type and the gleaming *foil* variety—are skilfully designed to catch the shopper's eye . . . attract her with a strong quality appeal . . . and sell her your product by showing it off to its best advantage.

United cartons give your product maximum protection. They increase your repeat sales through customer satisfaction . . . convenience . . . easy brand identification. Special locking features for rapid setting up save you labor costs in your plant.

You can have a United carton custom-designed to your exact requirements. Our packaging engineers will gladly show you how, without obligation. Write United today for information, samples.



UNITED BOARD & CARTON Corporation

Folding Cartons and Paper Specialties • FROM PULP TO FINISHED PRODUCT

285 MADISON AVENUE • NEW YORK 17, N.Y.

BOARD MILLS
Lockport, N.Y.; Thomson, N.Y.; Urbana, O.

CARTON PLANTS
Victory Mills, N.Y.; Syracuse, N.Y.; Brooklyn, N.Y.; Cohoes, N.Y.; Springfield, O.

Broder does it again

COMPLETELY REVOLUTIONARY

PRECISION PROPULSION

4 PIN CUP SWIVEL LIPSTICK CONTAINER*

Wholly different from anything ever made

Fool-proof mechanism as accurate and velvet-smooth as a precision watch movement

ALWAYS

- Eliminates cup wobble.
- Prevents shearing and taking off sheen of filler.
- Completely locked in four places at all times.
- Cup rides on 4 pins on a double track.
- No jamming — Pins cannot slip out of track
- Eliminates returns due to faulty or defective mechanism.

Plus BRODER patented Free Wheeling — the cup which rides up or down ONLY when the cap is off. Gives you a NON-SMUDGE CAP.

In Rich Low DeLuxe All-Polished Brass protected by a Startling New NON TARNISH Lacqeur

LOOKS BETTER . . . WORKS BETTER . . . COSTS LESS

PHONE . . . WIRE . . . WRITE

BRODER INDUSTRIES

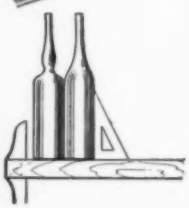
INCORPORATED

*Pat. Pdg.

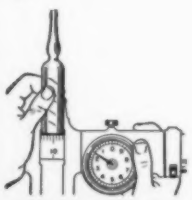
55 FERRIS STREET, BROOKLYN 31, N. Y. · MAin 4-3772

Three symbols of superiority

Coby ampoules are "vacuum-free before snipping." Glass dust that results from snipping operation is *not* sucked within the ampoule. It is, rather, readily drawn up and carried away by giant dust collectors attached to each cutting bench.



Coby ampoules stand up straight without support. Ampoule necks are more concentric with filling needles, and machine-filling is more rapid, and accompanied by less breakage.



Coby ampoules are carefully calipered to ensure greater uniformity of inner volume. When subsequently filled and sealed, Coby ampoules aid materially in finishing the package that "sells on sight".

Coby engineers are constantly developing improvements that continue to make the Coby ampoule a better ampoule. Descriptive circular and price list of regularly stocked ampoules available on request.

Write Dept. C

THE COBY GLASS PRODUCTS CO.
ATTLEBORO, MASSACHUSETTS - U. S. A.

"National Can is as near as your telephone"

use *Quality Containers*
to **PROMOTE** and **PROTECT**....

Quality Products

Quality products sell better in *quality* containers . . . get better protection, too. So, for best results from your packages, choose those which effectively promote and protect your products. Be sure that the metal is of the best . . . that the shape is proper . . . that the label is lithographed in a distinctive colorful design. With these factors your containers will work for you in building sales.

Here is where National Can may be of very real help to you—in the design of the container itself, in the origination and layout of the illustration, in the selection of colors, in the photography. All these are created by National Can specialists working in personal cooperation, with full realization of your individual sales and protection problems. For colorful metal plate lithography and skillful package design and fabrication, you can rely on National Can's long experience in the manufacture of metal containers.

Why not improve your containers—make them worthy of your product, make them sell for you—by using the *complete* National Can package service? For details, just telephone our nearest sales office or plant.

6058

NATIONAL CAN
CORPORATION

Executive Offices: 110 EAST 42nd STREET, NEW YORK 17, N. Y.

Sales Offices and Plants in: Baltimore, Md. • Indianapolis, Ind. • Chicago, Ill. • Maspeth, N. Y. • Hamilton, Ohio • Canonsburg, Pa. • Boston, Mass. • St. Louis, Mo.

tops *in Sales Appeal*
tops *in Manufacturing Perfection*
lipstick containers . . .
by Plume & Atwood

● Ever wish for an entirely new and differently styled lipstick container . . . one that would have instant **"pick-me-up" appeal?** Of course you have, and so has every other cosmetic manufacturer. But, how often have you been told it was prohibitive in cost or impossible to make?

Here, at **Plume & Atwood,** difficult-to-make containers as well as standard types, like those above, are produced daily by the thousands . . . and at reasonable cost. Our engineering staff particularly welcomes those designs that are often thought to be impossible to make . . . for at Plume & Atwood, **the "impossible" is performed every day!**

Our representative will be pleased to call at your request.

The Plume & Atwood Mfg. Co.

EST. 1869 **WATERBURY, CONNECTICUT**

fine quality handmade glass containers are available in a variety of stock designs at Carr-Lowrey.

Style 377, illustrated above, makes an attractive package for perfumes. It is manufactured in four sizes.

Whether your need is for handmade or machine made glass containers you will find Carr-Lowrey a dependable source of supply.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE 3, MD. • *New York Office:* 500 FIFTH AVENUE • *Chicago Office:* 1502 MERCHANDISE MART

Why

A PLASKON MOLDING COMPOUND IS USED FOR THESE BEAUTIFUL CLOSURES

PLASKON CLOSURES are stoppers in more ways than one. Their exquisite designs . . . beautiful colors . . . and lustrous finishes all harmonize to lend an air of distinction that *stops* the feminine eye and helps to create sales.

Plaskon Materials can be molded into an almost endless variety of "personality" shapes . . . round or square, concave or convex, long or short. Plaskon Materials are available in a wide range of beautiful colors from translucent natural, through the pastels and brilliant hues, to jet black.

Molded Plaskon is delightfully smooth and friendly to the touch . . . handling of Plaskon Molded Color closures and containers encourages use of the products they enclose.

Plaskon Molded Color is harmless to the delicate aromas of creams, powders, perfumes and other cosmetics. It is impervious to the effects of oils, fats, greases, and commercial solvents. There are real production economies in the fast, multiple production of Plaskon closures and containers. Write for free book on Plaskon* Molded Color.

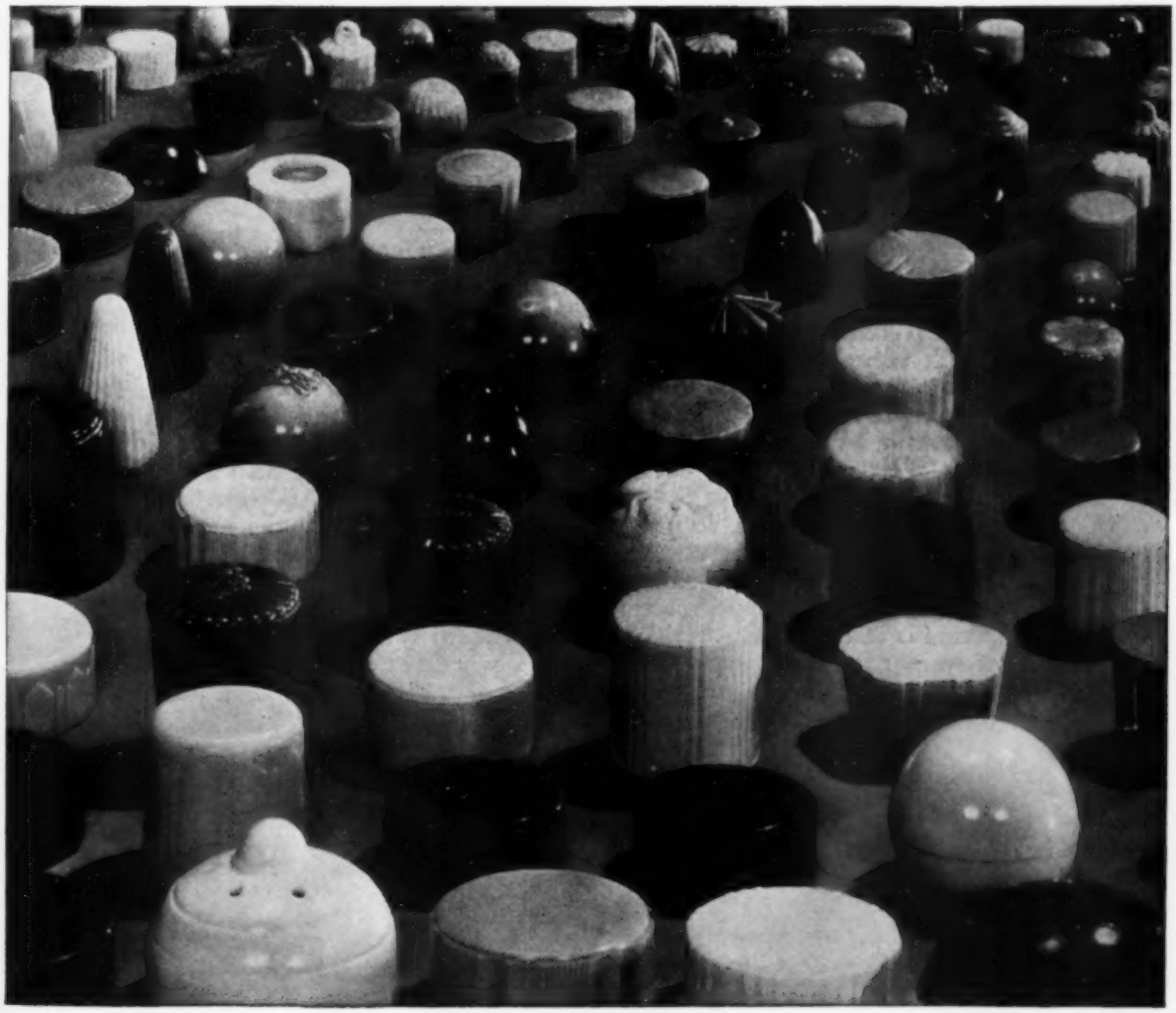
*Reg. U. S. Pat. Off.

PLASKON

TRADE MARK REGISTERED

MOLDED COLOR

PLASKON DIVISION, LIBBEY • OWENS • FORD GLASS CO., 2110 Sylvan Ave., Toledo 6, Ohio • *In Canada:* Canadian Industries, Ltd., Montreal, P.Q.



The NEW THIRD EDITION OF MODERN COSMETICS IS READY!

MODERN COSMETICS, published by the Drug & Cosmetic Industry, was the first book on the formulation and manufacturing procedure of cosmetics to be published in America. It was an immediate success. In two previous editions eight thousand copies were sold in America and in forty-two foreign countries.

The Second Edition of MODERN COSMETICS has been out of print for three years. During that time we have received more than a thousand inquiries for this work. But rather than bring out a hurry-up job to meet the urgent demand we decided to wait.

E. G. Thomssen, B.S., A.M., Ph.D., Chemical Consultant, Author of "Soap Making Manual," "Modern Soap Making," and well-known contributor to technical literature, was engaged to completely rewrite this new Third Edition—to bring to it all the new developments of the past ten years in manufacturing instructions, materials, and formulas.

To those who have made MODERN COSMETICS their handbook we say—this new edition will be infinitely more useful to you, because of the scope of new material, new tested formulas, and the correction and modernization of the procedure in formulation.

Chemist, factory manager, perfumer, owner—anyone interested in cosmetics will find MODERN COSMETICS a valuable help in business. It is a technical book, filled with formulas, procedure, manufacturing practices, yet so clearly and simply written than even one not connected with the industry can understand its text.

The most experienced chemist or factory manager will find in its wealth of information, useful methods new to him. The inexperienced man or woman who wants a clear understanding of the industry, wants to know something about how cosmetics are made, who is working on a small scale with the handicap of little experience or knowledge, will find the book easy to understand, a great help and guide.

To those who wish to procure MODERN COSMETICS, to the newcomers in the industry, we say—here is a book that, because of its completeness, the simple and easily followed instructions, the clearness with which every problem and every phase of cosmetic manufacture is discussed, the authority of a standard work, is well worth its weight in gold to you. For with it, you have a firm, thorough understanding of cosmetic manufacturing.

$8.00 POSTPAID

MODERN COSMETICS

by **E. G. THOMSSEN**
B.S. A.M. Ph.D.

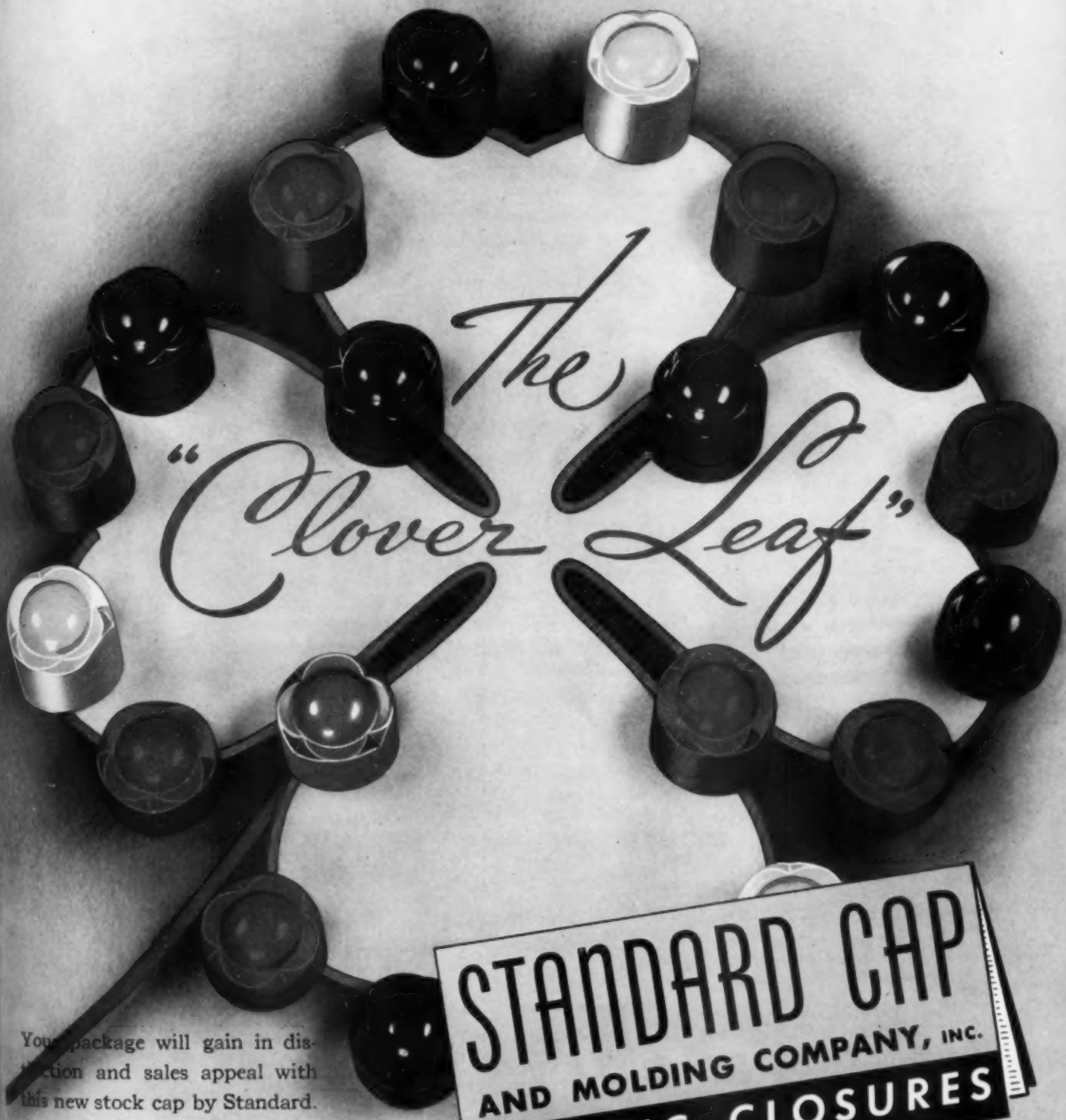
644 Pages **70 Chapters**

DRUG & COSMETIC INDUSTRY

101 West 31st Street **New York 1, N. Y.**

Announcing a New STOCK CAP

PARTICULARLY ATTRACTIVE FOR COSMETICS



Your package will gain in distinction and sales appeal with this new stock cap by Standard. Available in the most popular sizes, and in any colors. Write for details and prices.

STANDARD CAP
AND MOLDING COMPANY, INC.
PLASTIC CLOSURES

307 S. EATON STREET • BALTIMORE 24, MD.
OFFICES IN ALL PRINCIPAL CITIES

Aluminum Tubes Lower Production Costs!

Women workers can do a man-size job of filling, handling, and storing lightweight tubes of Alcoa Aluminum. Aluminum tubes are one-third the weight of tubes made of other metals—a labor-saving, timesaving advantage that can lower production costs for you.

Think it over.

Aluminum tubes are being used safely . . . profitably . . . for packaging drug and food items; proving ideal for lubricants and heavy compounds, too. Whatever questions you may have about the suitability of your product for packaging in Alcoa Tubes, the Alcoa Packaging Laboratory will help supply the answer. Write to ALUMINUM COMPANY OF AMERICA, 1913 Gulf Building, Pittsburgh 19, Pennsylvania.

Package it in Aluminum

NON-TOXIC
SMART APPEARANCE
GREATER STRENGTH
LIGHT WEIGHT
EASY DISPENSABILITY
GOOD ECONOMY

ALCOA ALUMINUM

ALCOA ALUMINUM TUBES

Mrs. Consumer asked for an easy-pouring container . . .

WE PRODUCED THE Shelfline!

a new line of Duraglas containers

"Shelfline" containers have a new style shoulder structure that acts as a funnel—guarantees convenient, easy pouring! Surveys reveal this is a packaging feature Mrs. Consumer prizes!

Months of intensive research, designing and engineering have produced this new "Shelfline." It was made-to-order—your orders and your customers'!

Here are some other container advantages that consumers prefer and packers demand . . . advantages that the new "Shelfline" offers:

1 **Balanced, space-saving proportions . . . stable base . . . won't roll on counter, table or shelves.**

2 *** Easy-to-grip . . . easy-to-open and recap!**

3 **Wide front and back panels for maximum label display . . . as well as adequate space for side labeling if desired.**

4 **** Twelve sizes: ½ oz., ¾ oz., 1 oz., 2 oz., 3 oz., 4 oz., 5 oz., 6 oz., 8 oz., 12 oz., 16 oz., 32 oz.!**

5 **Only *four* cap sizes required for *all* twelve sizes of the narrow-neck line.**

6 **Three colors: amber, flint and emerald green to fit every need.**

You will find this new "Shelfline" adaptable to high-speed automatic filling and labeling equipment. It can replace many of your present containers, simplifying and securing family identity throughout entire lines. Call on us—we can fill your needs NOW.

*** Oblong shape fits securely in hand—is easy to grasp even when hands are wet.**

**** The "Shelfline" is a *complete* line—12 sizes, 3 colors . . . 36 containers to choose from.**

Duraglas CONTAINERS—PROTECTORS OF QUALITY

OWENS-ILLINOIS GLASS COMPANY • TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES

Choose Bromides that do Multiple Jobs

If in your manufacturing of pharmaceutical products you can find one raw material that can do several jobs well, inventory costs go down.

And if that raw material not only has multiple uses in manufacturing, but physical and chemical uniformity run after run—you have the happy combination of quality at low cost. Such are Baker's Sodium, Potassium, and Ammonium Bromides.

You save production costs because Baker's Bromides can be directly compressed into tablets without the need for further granulation—or quickly dissolved into unusually clear solutions.

Uniformity of Baker's Bromides helps give you trouble-free manufacture. Baker's *measured purity* helps assure you of a pharmaceutical product of highest efficacy.

With today's need to watch every cost and keep quality standards high, Baker's Bromides have a wide appeal. No matter what form of bromide preparations you manufacture, specify Baker when you order Bromides, and you'll specify quality with economy.

Inquiries concerning Baker's Bromides, or other Baker fine chemicals, are invited. Write to *Fine Chemical Division,* J. T. Baker Chemical Company, Phillipsburg, New Jersey.

Baker's Chemicals

C. P. ANALYZED · FINE · INDUSTRIAL

NEWS...

Dr. Richards on Merck Board

Dr. A. N. Richards, Bryn Mawr, Pa., has been elected a director of Merck & Co., to assume his duties October 1. Dr. Richards possesses a broad experience in and knowledge of the problems in medical research and its related sciences which are common to educational institutions, the government, and industry, according to Merck President George W. Merck. Dr. Richards is president of the National Academy of Sciences, Washington; emeritus professor of pharmacology in the Medical School of the University of Pennsylvania, and recently retired vice-president in charge of medical affairs at the same university; advisor of the Merck Institute and a member of numerous professional societies.

DR. A. N. RICHARDS

John Powell Celebrates 25 Years

John Powell & Co., New York, celebrated its 25th anniversary last month with a staff party in the Park Avenue offices of the firm. The occasion was also the birthday of John Powell, company founder. From a small beginning as an importer and dealer in botanical drugs, the Powell company has grown to a world-wide organization which is a top figure in the insecticide industry. One of the first to specialize in pyrethrum insecticides, the company is one of the largest in this branch of the industry. Following the trend in insecticides from year to year, the company has expanded into the rotenone field, then into other botanicals and finally into synthetic organic chemicals which make up so many of the newer insecticide products.

Kesser Joins Vitarine

Julius Kesser, former vice-president of the Drug Products Company, has joined the Vitarine Company, subsidiary of the Laxseed Company, New York. Mr. Kesser's duties will be the development of the business of the Vitarine Company and the promotion and development of new accounts. He was one of the organizers of the Purity Drug Company in 1933, and became associated with Drug Products Company when it merged with Purity Drug in 1945. Prior to the organization of Purity Drug, he was sales manager of the pharmaceutical department of Brewer & Co., Worcester, Mass.

Crittenton Names Pepsodent Sales Mgr.

Charles N. Crittenton has been appointed to a newly created position of general sales manager of the Pepsodent Division, Lever Brothers Company. Mr. Crittenton will work under the supervision of George R. Stege, Jr., Pepsodent's director of sales. Mr. Crittenton comes from 15 years association with Colgate-Palmolive-Peet Co., where he served as assistant sales manager of the toilet articles division for the last two years.

C. N. CRITTENTON

Aumach Heads Nyal Sales

All sales activities of the Nyal Company have been placed under the direction of C. S. Aumach, according to Dr. H. A. Cheplin, Nyal president. Mr. Aumach possesses nearly 20 years experience in pharmaceutical sales. Prior to joining Nyal, he was divisional sales manager for William R. Warner & Company.

In his new position, Mr. Aumach will supervise the 40 members of a newly organized sales staff which insures nationwide distribution of the Nyal line through the company's franchised outlets. Recently the company's line has been increased nearly 100 per cent, there being added, among other items, vitamin preparations of increased potency, penicillin tablets, a modern insect repellant, moth-proofing compounds and a poison ivy lotion.

C. S. AUMACH

Bouillette Returns to Givaudan

Pierre Bouillette, active in the perfume and cosmetic industries in France, the United States, and Brazil for two decades, has returned to Givaudan-Delawanna, Inc., to engage in sales promotion of Givaudan specialties and associated products, and to act in a technical sales service capacity in cooperation with the sales staff.

Marsh Heads U. S. Industrial

William P. Marsh, Jr. has been advanced from executive vice-president to president of U. S. Industrial Chemicals, Inc., succeeding Glenn L. Haskell who has retired and been named vice chairman of the board of directors. Mr. Marsh joined the company in 1937, was elected a vice-president in 1943, a director in 1947, and executive vice-president the first of this year. Mr. Haskell joined the company in 1921, became a director in 1934, and president in 1943.

Orris Root extractions

by
BRUNO COURT

A fine collection of products fro
lected rhizomes of the Florentin

- Orris Concrete Extra
- Orris Concrete Surfine
- Orris Absolute (Irone)
- Orris Liquid
- Orris Liquid Concentrated
- Orris Resinoid Extra for Extracts
- Orris Resinoid for Extracts
- Orris Resinoid Extra for Soap
- Orris "S" Resinoid for Soap Specia
- Orris Resinoid Florentine

These Orris Root products of
Court are offered exclusive
Naugatuck. Write for quotation
samples.

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324 FOURTH AVENUE, NEW YORK 10, N. Y. • 14 NORTH FRANKLIN ST., CHICAGO 6, ILL.
LOS ANGELES • TORONTO • MONTREAL
Sole distributors for:
BRUNO COURT, S. A., Grasse, France • C. A. P. P., Casablanca, Morocco

Society of Perfumers Meeting

The first regular dinner meeting of the American Society of Perfumers for the year, 1948–1949, will be held at 6 P. M., Wednesday, September 15 at the Advertising Club, New York. Dr. Ernest Guenther, vice-president and chief chemist of Fritzsche Brothers will present his lecture, accompanied by color motion pictures, on Essential Oil Production in Africa. The pictures, taken prior to the outbreak of World War II, will portray methods of production of oils of thyme, and origanum in Zanzibar and Madagascar, oil of ylang ylang in Nossi Be, and oils of vetiver and geranium on Reunion Island. The meeting is an open one to which friends of members are invited. Reservations will be accepted on a first-come basis until the limited facilities are exhausted. Reservations should reach R. B. Houk, treasurer, Dodge and Olcott, Inc., 180 Varick St., New York 14, not later than September 13.

Maltine Moves to New Plant

The Maltine Company has completed removal of equipment and its staff from Brooklyn to Morris Plains, N. J. Since Maltine sales volume has expanded 400 per cent since 1940, enlarged quarters were essential. The largest of the three new brick structures contains manufacturing areas, cafeteria, and general offices. Nearby is the research building housing the animal colony, a library, pilot plant, and laboratories for the research staff. A separate power house provides heat and steam and houses the 150,000 gallon fire reservoir. Water is from the company's wells. Productive capacity is 200 per cent greater than at the former Brooklyn location.

Light throughout is fluorescent, while a maximum amount of natural light is provided by windows which make up 75 per cent of all outside wall space. Acoustical treatment has been provided and music is wired into most areas of the buildings. Outdoor facilities include a baseball diamond and brook-fed swimming pool. The company is in its 74th year.

Dreyer Names Justesen on West Coast

P. R. Dreyer Inc., announces that it is now represented on the West Coast by Paul Justesen, 1046 South Olive St., Los Angeles 15. Mr. Justesen has had considerable experience in the essential oil industry.

Citronella and Lemongrass Oils

Oficina Controladora de Aceites Esenciales of Guatemala City, Guatemala, an organization composed of all producers in Guatemala of citronella and lemongrass oils, have appointed Julian W. Lyon and Harold A. Sothern as exclusive selling agents in the United States. Oficina have their offices and warehouse in Guatemala City, to which oils are shipped from the interior. Upon arrival every drum is examined and tested, and when found of correct quality, the drums are painted and marked and made ready for shipment. An oil from one source of two drums or more is blended to assure uniform quality. Shipments are directed to Puerto Barrios from which port the United Fruit Company has frequent sailings. Or orders may be shipped by Taca Airways at only a slight additional cost, planes leaving Guatemala daily.

Toni Company Expands Production

The Toni Company has expanded its St. Paul plant space by leasing for five years, 50,000 square feet in the Lindeke Building, in which the company already occupies 75,000 square feet. Of the new space, 38,000 square feet are located on the second floor, and 12,000 square feet on the first floor. The new space is necessitated by the rapid expansion in Toni sales which are currently breaking all previous records. The major part of the administrative staff has been moved to the Merchandise Mart in Chicago, but an office is still maintained in St. Paul.

William Barry, vice-president of the Mallinckrodt Chemical Works, on behalf of the company, receiving a Certificate of Achievement from the U. S. Navy Bureau of Medicine and Surgery July 15. Rear Admiral A. H. Dearing, District Medical Officer of the Third Naval District Headquarters at New York is presenting the Certificate to Mr. Barry.

Satorius Joins J. L. Hopkins & Co

Robert Satorius, grandson of the late Jesse L. Hopkins, founder of J. L. Hopkins & Co., New York, has joined the junior executive staff of the Hopkins Company. Mr. Satorius, a recent Princeton graduate, will be engaged successively in every phase of the business in preparation for future assumption of managerial duties. Another addition to the Hopkins junior executive staff is Robert Knapp. Both these men are veterans of the recent war.

Gauntlett Advanced by Upjohn

J. Curtis Gauntlett has been appointed assistant advertising manager of the Upjohn Company. Mr. Gauntlett who has been with Upjohn since 1941, served during the recent war as a Naval officer in the Pacific and in the Navy Informational Field Service Group.

Kennedy Honored

John R. Kennedy, chairman of the Board of Directors of Rexall Drug Company, Ltd., has by invitation, become a Fellow of the Royal Society for the Encouragement of Arts, Manufacturers and Commerce, and is now permitted, by royal authority, to use the initials F. R. S. A. after his name.

Iorns Represents White Metal

Clifford L. Iorns Company, St. Louis, has been appointed by White Metal Manufacturing Company, Hoboken, as its exclusive representative in Missouri, Southern Illinois, and Western Tennessee, according to Stanley M. Rumbough, Jr., director of sales.

Glyco Appoints Cohen

Samuel Cohen, formerly senior chemist for Glyco Products Co., has been appointed chief chemist of the Brooklyn Research Laboratories until they are transferred to Natrium, W. Va. He will then assume the duties of liaison and coordination between the research, pilot plant, and production departments.

Squibb Moves in Atlanta

E. R. Squibb & Sons have moved their Atlanta branch to new offices at Spring and Fifth Sts., office and warehouse occupying the entire first floor of a new building. The branch is managed by Rease Inge, and services Alabama, Florida, Georgia, Mississippi, South Carolina, and part of North Carolina.

AS A GLASS BLOWER NEEDS A PONTIL—

Gums in their Crude State need *Evenizing

In the hands of the skilled glassblower, the pontil or blowpipe makes possible the creation of almost an endless variety of hollow glass articles.

*Evenizing and the meticulous control system, established and maintained by S. B. Penick & Company, over the selecting, grading, blending, and milling of the crude material—make possible the production of gums of the highest quality. Under the experienced eyes of Penick laboratory technicians, gums are *evenized so that impurities created by nature are eliminated to the maximum degree.

Use Penick *EVENIZED ARABIC, TRAGACANTH, and KARAYA to bring out the best features of your product and to increase your sales volume.

THE WORLD'S LARGEST BOTANICAL DRUG HOUSE

*Only Penick Evenizes

S. B. PENICK & COMPANY

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Telephone, COrtlandt 7-1970

S. B. PENICK & COMPANY · ASHEVILLE · NEW YORK · CHICAGO · HIPPOCRATES

735 WEST DIVISION STREET, CHICAGO 10, ILL.
Telephone, MOHawk 5651

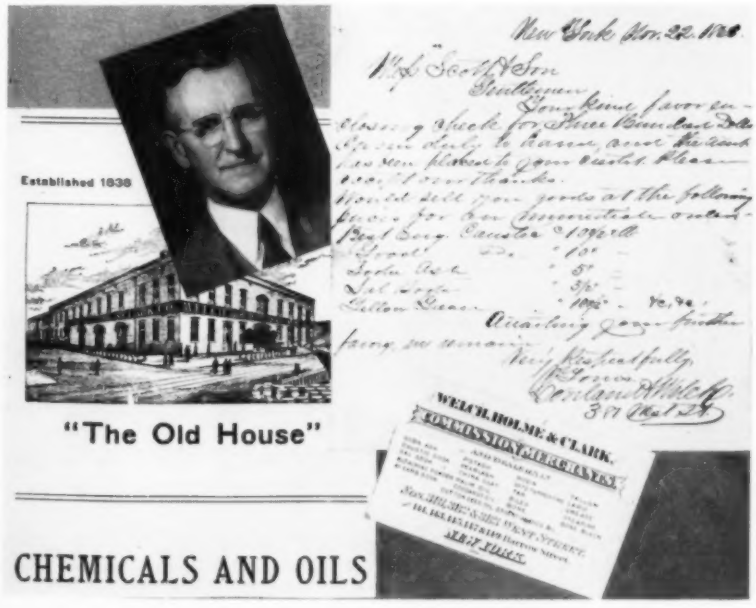
Welch, Holme & Clark Anniversaries

Some 55 friends and employees of Welch, Holme & Clark honored company president Elias D. Stults at a luncheon at the Waldorf-Astoria, Hotel, New York, July 30, in honor of his 50th year with the firm. President since 1929, he was presented with an engraved silver water pitcher and a framed engrossed scroll. Mr. Stults became office boy for the firm at the age of 16. A few years later he was promoted to salesman, becoming a member of the board of directors and secretary in 1922. In 1928, he was advanced to vice-president, becoming president the following year. Mr. Stults is a member of the Oil Trade Association of New Jersey and of New York, the New York Board of Trade, the Chemists Club, and the Mayor's Committee for Greater New York's Golden Jubilee. He is a past Master Mason and a former superintendent of Sunday Schools in his home town of Summit, N. J.

While President Stults is celebrating his 50th year with Welch, Holme & Clark, the company is celebrating its 110th anniversary, having been founded in 1838 by Oliver Loveland. Under the name of O. Loveland, Son & Co., the firm dealt mostly in lime, cement, and building materials. In 1858, the company began to service the soap through the activity of P. A. Welch, Loveland's son-in-law, and star salesman. In those days soap makers used lime in causticizing soda ash, and Mr. Welch recognized the advantage of supplying them with other raw materials.

In spite of many changes in ownership and personnel throughout the years, Welch, Holme & Clark remained a family affair. When the Lovelands retired, Welch remained sole member. Feeling the need in the firm of someone well acquainted with soap makers, he asked the young bookkeeper, Henry Holme (whose father was a retired soapmaker) to join. He engaged M. E. Clark, a native New Yorker, to give local color. Together they borrowed money, bought out Loveland's share, and changed the company name to P. A. Welch & Co. In 1870 the present name was adopted, and Holme's retired father was added to the partnership.

In the years that followed, A. M. Sherrill and his son, Howard, became partners and presidents. Mr. Clark then succeeded a head of the firm until 1929 when Elias D. Stults was elected as the seventh president. The firm was incorporated by Sherrill in New Jersey and by Clark in New York. It survived the effects of panic, civil war, two world wars, and four depressions. It outgrew all its warehouses until it now occupies a large building in New York as well as a warehouse in Newark, N. J. As officers of the oldest chemical supply house in the country today, President Stults and Vice-president Hirsch are looking forward to "another 110 years of progress and growth."



Dermetic Oil Plant in Sweden

Production of hydronized oils is getting under way at the new plant of Dermetics in Stockholm, Sweden, according to Fred L. Runnels who returned last month from a two months stay in Stockholm. During his stay, Mr. Runnels initiated the countless details incurred in launching a new factory in a foreign land. He has boundless enthusiasm for the stability, integrity, and cooperation of the Swedish people. Mr. Runnels is research chemist at the Dermetics plant in Seattle, Wash., and is the son of G. D. Runnels, owner and president of the company.

Michigan Makes Potassium Bromate

Michigan Chemical Corporation, St. Louis, Mich., recently started full-scale production of potassium bromate, following a period of intensive laboratory, pilot plant, and engineering effort. This development was in response to the rapidly growing demand for the product as a neutralizer in cold-wave home permanent preparations.

Heyden Enters Streptomycin Field

Heyden Chemical Corporation has entered the streptomycin field on a large scale using a new process which, according to Heyden President B. R. Armour, is a marked improvement over conventional methods and results in a product of greater purity. The product is being produced in a new unit especially designed for the purpose.

Lydia O'Leary to Market Cosmetics

Lydia O'Leary will establish a cosmetics department October 1. Items which will be added to the Cover Mark line are said to have been tested in Paris.

Roehrich Reports on Mid-West

P. E. Roehrich, Richford Corp., recently returning from an extended trip through several of mid-western states, says that many cosmetic manufacturers are following suggestions made at the Toilet Goods Association meeting this spring in packaging improvement and design. Manufacturers seem chiefly interested in and striving for attractiveness within reasonable costs so as not to be forced to face the necessity of increasing retail prices of finished goods. The house-to-house distributors of cosmetics are the most active in this respect, apparently in an effort to retain their large volume of sales and to create still more sales through a genuine effort to step up selling efforts to consumers.

CALFLORAL GARDENIA

As the Gardenia flower suggests romance so does Calfloral Gardenia convey the fresh flower fragrance in extract and cologne.

Calfloral Gardenia is distinguished by extreme tenaciousness as much as by its deep richness and delicate floweriness.

We invite you to investigate the potentialities of Calfloral Gardenia as the basis for an outstanding perfume.

The use test is the only test!

COMPAGNIE PARENTO

INCORPORATED

CROTON • ON • HUDSON, NEW YORK

NEW YORK DETROIT CHICAGO LOS ANGELES SAN FRANCISCO

TORONTO MONTREAL

Hanlon Joins Dermetics

John W. Hanlon, formerly midwest divisional sales manager for Milkmaid, Inc., has been appointed director of sales

JOHN W. HANLON

for Dermetics, according to an announcement by G. D. Runnels, president of Dermetics.

E. L. Patch Heads Company

Edgar L. Patch has been elected president of the E. L. Patch Company, succeeding his father, Ralph R. Patch, who was president and treasurer of the company since 1924. Edgar Patch represents the third generation to head the Patch company founded in 1888 by Prof. Edgar L. Patch, who was president until his death in 1924.

Graduating from Dartmouth College in 1933, and from Harvard Business School in 1935, Edgar Patch has been associated with the company since that time, occupying the positions of assistant sales manager, sales manager, director, vice-president, and assistant general manager.

Ralph R. Patch, retiring president, continues as treasurer and a member of the board of directors, while Fred A. Lawson continues as secretary and general manager. James A. Patch was re-elected vice-president, and William S. Lister as assistant treasurer. These officers, with Charles Wesley Dunn and Dr. Arthur D. Holmes, comprise the directorate.

Three More With Fritzsche 25 Yrs.

In less than three months, Fritzsche Brothers' Quarter of a Century Club has taken in three new members—its 35th, 36th, and 37th. The new members are Emil Anderson of the Essence Department, who joined the firm April 29, 1923; William Bertodatti of the Order Department, who reached his anniversary on June 20; and Leslie Joyner of Fritzsche's Canadian affiliate, who completed his 25th year on July 9. Luncheons in honor of Mr. Anderson and Mr. Bertodatti were given at the New York Athletic Club, while the celebration in honor of Mr. Joyner was held in the Granite Club, Toronto. Each member received the officers' and board of directors' gift of a government bond as well as appropriate mementos from their fellow workers.

Colgate Appoints Elliott

John L. Elliott has been appointed vice-president in charge of western operations of the Colgate-Palmolive-Peet Company, having his headquarters at the company plant at Berkeley, Calif. He succeeds B. W. Railey.

Heald Resigns from Norwich

Charles D. Heald has resigned as secretary and counsel for the Norwich Pharmacal Company.

Bell on Grove Directorate

Frank F. Bell, director of sales of Grove Laboratories, has been elected a member of the board of directors of that company.

APMA Winter Meeting

The American Pharmaceutical Manufacturers Association will hold its mid-winter meeting at the Waldorf-Astoria Hotel, New York, December 6, 7, and 8.

Celebrates Golden Wedding

John Weisensee, head of the shipping department of Welch, Holme, & Clark, New York, is celebrating his golden Wedding Anniversary. Married in 1898, he and Mrs. Weisensee are being honored at a party given by the City of New York, which is celebrating its own Golden Jubilee this year. From the hands of the perennial M. C., Grover Whalen, they will receive gold wedding

MR. AND MRS. WEISENSEE

rings on behalf of the city. More than 40 years of Mr. Weisensee's 50 years of "wedded bliss" have been spent in the employ of Welch, Holme, & Clark.

Pankratz Joins Flint, Eaton & Co.

Ronald Pankratz has joined Flint, Eaton & Company, Decatur, Ill., as control chemist in charge of the An-

RONALD PANKRATZ

alytical and Control Department. Mr. Pankratz was formerly associated with the Cole Chemical Company, St. Louis, and more recently with Western Cartridge Company, also of St. Louis.

NWDA Fall Meeting

The National Wholesale Druggists Association will hold its annual meeting at the Palmer House, Chicago, October 18, 19, and 20.

Whitehall to Move Plants

Two New England plants of Whitehall Pharmacal Co. will move to Elkhart, Ind., within the next two months, according to Lee Schwenk, New Haven plant manager. The plants to be moved are those located in New Haven and Lowell, Mass. The plant located at Knoxville, Tenn. is not to be affected.

In addition, warehousing facilities now occupied by the company in Chicago will be transferred to a modern building on a railroad siding at Elkhart, making for more economical operation. About 100 local employees in New Haven are expected to be shifted. The New Haven plant, which has been producing Kolynos toothpaste since 1908, also produces Kolynos tooth powder, Bisodol and several other products.

Carbide and Carbon Booklet

Carbide and Carbon Chemicals Corporation has just issued a new and revised edition of the booklet, Physical Properties of Synthetic Organic Chemicals. The 12-page booklet contains data on applications and physical properties for more than 185 synthetic organic chemicals. The material is in tabular form for easy reference. Copies on request.

Scientist and Engineer Placement

The Scientists' and Engineers' Association, Rock Rimmon Road, Stamford, Conn., has been organized as a non-profit corporation to perform a service which specializes in placing scientists and engineers in employment connections throughout the United States. This activity of the Association is limited to chemists, chemical engineers, electrical, electronic and radio engineers, physicists, mathematicians, metallurgists, mineralogists, ceramics and glass technologists, bacteriologists, mechanical engineers (including aeronautical, automotive, hearing, etc.) industrial and management engineers. To encourage cooperative effort among scientists and engineers in position to help one another attain employment, the Association provides financial awards for productive information relative to positions open, and relative to scientists or engineers open for new employment. Executive secretary of the Association is A. D. Halliwell, formerly vice-president and sales manager of Elliott Service Co., New York, and formerly personnel director of Machlett Laboratories, X-ray tube makers, Stamford.

Van Ameringen Again to Direct Seminar

A. L. van Ameringen will again direct the Seminar on the Evaluation and Appreciation of Perfume to be held at Columbia University College of Pharmacy starting Wednesday, October 13, according to Dean C. W. Ballard. Several new discussion subjects will be added to the agenda including the cosmetic industry's advertising policies and whether advertising approach can be changed to create maximum consumption. Also included this year will be a discussion of certain phases of packaging. Other points to be repeated are the Attributes of a Good Perfume, How to Judge a Perfume, Selecting Scents for Cosmetics, How Perfume Should be Used, Inexpensive Perfumes Can Be Good, and the Buyer's Responsibility to the Consuming Public.

There will be six one hour weekly lectures each followed by a one hour period of questions and discussion.

Edmund Kenez Co. Named Agent

The Edmund Kenez Co., New York, has been appointed sole agent for the Eastern United States by S. A. Chemical Works Boechout, Boechout, Belgium, producers of perfume oils, essences, and bases for drugs, cosmetics.

Grunig Heads Tatoo and Bristow

Edmond L. Grunig has been named president of Tatoo, Inc., and the Bristow Corporation, Chicago. Tatoo is introducing two combination cosmetic packages this year, and plans extensive new products, packaging and heavy consumer advertising for 1949. Bristow is the marketing organization for Lynette's Spellbound and Blue Sapphire perfumes and other allied merchandise.

Mr. Grunig has a long and successful cosmetic history as well as an interesting background of international banking and finance. He was a member of the War Crimes Commission at Nurnberg.

White Metal Appoints Clowe

White Metal Manufacturing Company, Hoboken, has appointed H. W. Clowe & Co., Jackson, Miss., exclusive representative in Alabama, Arkansas, Louisiana, and Mississippi.

G & W Warehouse in West

G & W Laboratories recently opened a new warehouse in San Francisco, where large supplies of glycerine and medicated suppositories will be carried to facilitate distribution on the West Coast.

New Catalogs Issued

New catalogs have recently been issued by:

Aroscent, Inc., Brooklyn, wholesale catalog and price list of aromatic raw materials for perfuming cosmetics, and soaps.

Dodge & Olcott, Inc., August price list of essential oils, flavors, oleo resins, vanilla, aromatic chemicals, and kindred products.

Magnus, Mabee & Reynard, Inc., third quarter price list and catalog of essential oils, balsams, oleo resins, certified colors, flavoring materials, and basic perfume products.

Mann Fine Chemicals, Inc., August wholesale price list of natural and synthetic estrogens.

Norda Essential Oil and Chemical Company, Inc., price list of essential oils, aromatic chemicals, scents, and odors. An attractive sixteen-page booklet which is the first of a series to be issued several times each year.

Commercial Solvents Adds Chemists

Commercial Solvents Corporation has added personnel to its Research and Development Department at Terre Haute. New research chemists are: Dr. Robert W. Shortridge, formerly with Midwest Research Institute; Harold I. Yalowitz, from the U. S. Rubber Company; Walter E. Gerard, John T. Craig, and Robert R. Bennett. Emory E. Toops, Jr., from Illinois Institute of Technology, has been engaged as an analytical chemist, and Zachariah C. Dameron, Jr., a graduate of Virginia Military Institute, as chemical engineer.

Dr. John R. Rippetoe, laboratory director of Schieffelin & Co. since 1914, and associated with the company since 1906, retired after 42 years service. Tributes were paid during a luncheon at Nikolaus' Restaurant in New York. Shown above from left to right are: Yale Campbell, Dr. Rippetoe's successor; William Jay Schieffelin Jr., company president; Dr. Rippetoe; William Jay Schieffelin Sr., past president of the company; Ronald Phelps and W. H. Frame, company vice-presidents.

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U.S.I. CHEMICAL NEWS

August ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1948

Develops MS-Soluble Alkyd Compatible With Amine Resins

Aroplaz 1081-M Helps Produce Quality Finishes at Lower Cost

Aroplaz 1081-M, a new mineral spirits soluble alkyd, compatible in all ratios with most melamine and urea resins, has been developed and is now being marketed by U. S. Industrial Chemicals, Inc.

This high viscosity, pure oxidizing medium-oil-length alkyd, for application by brush, dip or spray, can be used advantageously for industrial baking finishes, either alone or in combination with amine resins. It can be baked or air-dried without amine resins for industrial goods and general utility finishes.

High Package Consistency With Low Solids

Use of Aroplaz 1081-M will permit economical production of top quality finishes at considerably lower cost, because its very high viscosity allows preparation of such finishes at standard package consistency with much lower than usual vehicle solids content. Satisfactory enamel package consistency can be maintained with vehicles ranging as low as 33 to 36 per cent solids.

The resin can be used in white or colored formulations for industrial applications. Air-dried films based on Aroplaz 1081-M possess good initial color and gloss, as well as toughness, adhesion, and exterior durability. At the same time, the finishes exhibit much better "through dry" and gloss-retentive properties than conventional alkyds of similar oil length.

MORE

More Than Ninety Percent Of Low-pressure Aerosols Now Contain 'Pyrenones'

Concentrates Are Non-Toxic to Man and Animals — Free From Odor, Irritation, Fire Hazards

Pyrenone aerosol concentrates, made from technical piperonyl butoxide and pyrethrins, are present in more than ninety per cent of all low-pressure aerosol formulations, it was revealed recently. The new low-pressure aerosol bombs, in which U.S.I. pyrenones are essential components, are said to be simple and clean to use, and to destroy most household insect pests with very small amounts of spray. Obtainable from an increasing number of manufacturers, they are more economically priced than the more familiar high-pressure bombs.

Pyrenones Meet Low-Pressure Aerosol Requirements

Aerosols, as they were developed for the armed forces, and as they are most widely known by the public, are of the type more accurately termed "liquefied gas aerosols." They are made up of a mixture of gas or gases which liquefy under low pressures, and a concentrated oil solution of insecticide ingredients which is completely soluble in the liquefied gas. The weight ratio of the two lies generally in the range of 80-90 parts of gas to 10-20 parts of insecticide solution.

NEW LOW-PRESSURE AEROSOLS are economical, simple, clean to use. More than ninety per cent of them contain U.S.I. Pyrenones — non-inflammable, odorless products which are highly toxic to insects, non-toxic to man and animals.

To whatever extent is possible, it is required that the mixture of gas and insecticide solution be: (1) Highly insecticidal, requiring only small doses (e.g., 3.0 grams per 1,000 cubic feet) for control of common household flying insects. (2) Free from odor, irritation, or toxic hazards when man or animals are exposed to the aerosol mist. (3) Non-inflammable and otherwise safe for normal handling, storage, and use.

Pyrenones for the insecticide solution phase of aerosol formulations fulfill all these requirements. They consist of chemically and

MORE

New Cure Found For Blind Staggers

"Blind staggers" (selenium poisoning) of cattle can be counteracted by the amino acid, methionine, according to a disclosure made recently at a meeting of a prominent American scientific society.

Selenium poisoning has killed thousands of sheep and cattle in the dry plains of the west, the investigators state. Although notable progress has been made in preventing the disease by excluding selenate-containing soils from pasture and farming lands, "much work remains to be done on the mechanism of the disease."

The investigators found that methionine was capable of reversing the effect of the selenate. Moreover, they stated, "the evidence pointed to its action as being specific, for a definite relationship was found to exist between the methionine necessary to counteract a given amount of selenate."

THE AMERICAN HYDROCARBON SYNTHESIS: VIII

New Source Of Alcohols Provided By American Hydrocarbon Synthesis

The American Hydrocarbon Synthesis will provide a new industrial source of methyl, ethyl, and normal-butyl alcohol. From the process will also come commercial quantities of now hard-to-get alcohols such as isobutyl, normal-propyl, isoamyl, and normal-amyl. The availability of these compounds will stimulate their applications in the protective coatings, pharmaceutical, and other key industries, paving the way toward new developments.

Alcohols Widely Used

In industrial chemistry, no group of organic raw materials is more widely used than the alcohols. They are employed as solvents and solvent activators for a wide range of substances, and form an important class of intermediates. Products resulting from their chemical reactions have an even more extensive sphere of application than the alcohols themselves.

Up to the present, each member of this important alcohol group has been obtained from a separate source. For example, until recent years, methyl (wood) alcohol was distilled from pyroligneous liquors resulting from the destructive distillation of wood. During the last decade, however, the bulk of methyl alcohol has been prepared synthetically from the interaction of carbon monoxide and hydrogen. Ethyl alcohol is produced naturally from a fermentation process, or synthetically from ethylene gas. Fermentation provides a natural source for butanol; and the compound is also manufactured synthetically from acetaldehyde.

All Lower Alcohols From Common Source

The American Hydrocarbon Synthesis provides a single source for all three of these well-known alcohols. In addition to these compounds, the water-soluble stream of the process also supplies isobutyl alcohol, normal-propyl alcohol, isoamyl alcohol, and normal-amyl alcohol. These compounds today have limited commercial applications, but this is doubtlessly due to the lack of a large-scale source of supply.

Use of Lesser-Known Alcohols to be Stimulated

The establishment of a dependable commercial source of supply will stimulate the applications of these heretofore less used

MORE

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August ★ **U.S.I. CHEMICAL NEWS** ★ 1948

CONTINUED

Hydrocarbon Synthesis

lower alcohols. They will form a much desired complement to the three alcohols — methyl, ethyl, and normal-butyl — most widely used at the present. They will provide users with a greater choice in the selection of the proper solvent. Many specialty uses will be found for them, particularly for the amyls; and products synthesized from them will possess a wider range of physical properties.

Aid to Lacquer Formulators

An example of the potentialities of the new compounds is found in the case of normal-propyl alcohol. As one would expect from its position in the aliphatic alcohol series, its properties are midway between those of ethyl and normal-butyl alcohol. The properties of the esters of these three alcohols from the same acid bear similar relationships. This fact gives lacquer formulators greater latitude in establishing a balanced solvent composition.

Here is how it would work in an actual situation: The wide use of ethyl acetate and butyl acetate in lacquer formulations is well known. But propyl acetate, used in conjunction with them, will yield a solvent mixture more nearly uniform over its drying period.

Pure Normal-Amyl Alcohol

Normal-amyl alcohol, unmixed with other amyl alcohols, will be an important addition to the five-carbon alcohols. Nearly all commercial amyl alcohols at present are mixtures of the several five-carbon compounds. The fermentation product, for example, is a mixture of isoamyl and active amyl alcohols. The bulk of the synthetic amyl alcohols, obtained through the chlorination of pentane, are mixtures of amyl alcohols containing secondary and branched chain compounds.

Pure normal-amyl alcohol will provide better solvent power than the amyl alcohols now on the market. Wide application for this compound is anticipated in the drug and pharmaceutical industries, both as a solvent and as an intermediate. And, because normal-amyl esters of the lower aliphatic acids have better solvent powers for nitrocellulose than the secondary or isoamyl alcohols, the normal esters will be welcomed by the lacquer formulators as well.

Lower Normal Alcohols Available

U.S.I. will make a complete series of the low normal alcohols available from the water-soluble stream of the American Hydrocarbon Synthesis process. This is part of U.S.I.'s continually expanding program of service to industry. The date of availability will be announced in a forthcoming issue of *U.S.I. Chemical News.*

CONTINUED

Low-Pressure Aerosols

entomologically standardized oil concentrates of technical piperonyl butoxide and purified extracts of pyrethrum. The ratio of piperonyl butoxide to pyrethrins and total concentration of the two is pre-determined by the perform-

New Pamphlet On Low-Pressure Aerosols

A four-page guide to the formulation of low-pressure liquefied gas insecticide aerosols has just been published by the Insecticide Division of U. S. Industrial Chemicals, Inc. Second in a series designed to acquaint insecticide formulators, entomologists, and other users of insecticide materials with the properties and applications of U.S.I. products in this field, it discusses in detail the insecticide ingredient phase of aerosols. Copies may be obtained by writing the Editor of *Chemical News.*

ance characteristics desired in the finished aerosol, and includes consideration of any other insecticidal agent to be utilized in the formula. Nearly all conceivable preferences in the way of performance requirements are obtainable in pyrenone concentrates.

CONTINUED

MS-Soluble Alkyd

SPECIFICATIONS • AROPLAZ 1081-M

Non-Volatile: 49-51%
Solvent: Mineral Spirits
Viscosity (G.H.): Z_4-Z_6 (63.4-148 poises)
Acid Value (Solids): 6-10
Color, Solution (Gardner '33): 6-8
Wt. per Gal. at 25° (Solution): 7.65-7.75 Pounds
Wt. per Gal. at 25° (Solids): 9.20-9.30 Pounds
P.A. Content of Non-Volatile: 34% by weight
Oil Content of Non-Volatile: 50% by weight

TECHNICAL DEVELOPMENTS

Further information regarding the manufacturers of these items may be obtained by writing U.S.I.

A new soybean resin, described as a fine powder, light cream in color, with high adhesive strength, is claimed to be compatible with isolated proteins, caseins, latex, and various pigments. **(No. 349)**

A glass that carries an electric current, developed secretly for the Armed Forces during the war, is now commercially available. It is designed to eliminate icing and fogging of windshields and windows. **(No. 350)**

A new vegetable wax, alleged to have a melting point of 180-1 degrees F. and to possess high oil-retention value, is claimed to be useful in the manufacture of carbon paper and carbon ink. **(No. 351)**

To simplify odor control problems, a new kit is now offered which contains 12 different masking agents now used successfully to increase the marketability of products having unattractive odors. **(No. 352)**

Two new metal cleaners, said to be effective individually or in combination for cleaning a wide variety of metals and alloys, are claimed to be without harmful physiological effect. **(No. 353)**

An organic formulae stencil, designed to facilitate the drawing of complex organic structural formulae, is described as containing eight characteristic ring systems. **(No. 354)**

To soften automobile undercoatings, a new product has been placed on the market which will soften undercoating in six to seven minutes permitting it to be scraped off with a putty knife, the manufacturer claims. **(No. 355)**

A line of anti-mycotic papers is designed to reduce the loss suffered through the action of fungi and molds. When used either as a liner or other wrapper, these papers are claimed to retard mold growth on bread, spices, tobacco, leather goods, marmalade, licorice and other products. **(No. 356)**

A fluorescent acrylic plastic, now marketed for the first time, may be used for self-illuminating lettering, and other industrial and commercial uses, the manufacturers suggest. **(No. 357)**

A new germicide, claimed to be 25 times more powerful than carbolic acid, is described as neither toxic nor irritating to the skin. **(No. 358)**

A stainless steel flexible hose, said to be designed specifically for the chemical industry, conveys liquids, acids, chemicals, steam, air and gases, the makers state. **(No. 359)**

U.S.I INDUSTRIAL CHEMICALS, INC.

60 EAST 42ND ST., NEW YORK 17, N. Y. U.S.I. BRANCHES IN ALL PRINCIPAL CITIES

ALCOHOLS
Amyl Alcohol
Butanol (Normal Butyl Alcohol)
Fusel Oil—Refined

Ethanol (Ethyl Alcohol)
Specially Denatured—all regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C.P. 96%
Absolute
*Super Pyro Anti-freeze
*Solox proprietary Solvent

***ANSOLS**
Ansol M
Ansol PR

*Registered Trade Mark

ACETIC ESTERS
Amyl Acetate
Butyl Acetate
Ethyl Acetate

OXALIC ESTERS
Dibutyl Oxalate
Diethyl Oxalate

PHTHALIC ESTERS
Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate

OTHER ESTERS
*Diatol
Diethyl Carbonate
Ethyl Chloroformate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloroanilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloroanilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodiumoxalacetate

ETHERS
Ethyl Ether
Ethyl Ether Absolute—A.C.S.

FEED CONCENTRATES
Riboflavin Concentrates *Vacatone 40
*Curbay B-G *Special Liquid Curbay

ACETONE
Chemically Pure

RESINS (Synthetic and Natural)
*Aroplaz—alkyds and allied materials
*Arofene—pure phenolics
*Arochem—modified types
Ester Gums—all types
Copgo Gums—raw, fused & esterified
Natural Resins—all standard grades

INSECTICIDE MATERIALS
*Pyrenone Concentrates
Pyrethrum Products
Rotenone Products

INSECTIFUGE MATERIALS
*Indalone
*Dimelone
Triple-Mix Repellents

OTHER PRODUCTS
Collodions Urethane, U.S.P.
Nitrocellulose Solutions DL-Methionine
Ethylene

Printed in U.S.A.

Bristol-Myers Advances Friden

John H. Friden was named vice-president in charge of the Engineering Division of Bristol-Myers Company early this month. He had been executive vice-

JOHN H. FRIDEN

president of Sun Tube Corporation, a Bristol-Myers subsidiary.

Born and educated in Sweden, receiving an M. E. degree from Sala Technical College, Mr. Friden came to this country in 1920. He served five years as an engineer with E. W. Bliss Co., joining Sun Tube in 1925. He was elected vice-president of Sun Tube in 1928, and executive vice-president in 1945.

Packaging Machinery Meeting

Packaging Machinery Manufacturers Institute will hold its 16th Annual Meeting at the Hotel Roosevelt, New York, October 12 and 13, according to George von Hofe, president.

Food Machinery Buys Stokes & Smith

Food Machinery Corporation has acquired Stokes & Smith Co., Philadelphia. Stokes & Smith are manufacturers of filling machines for powdered and granular products, pastes and creams, carton filling and sealing machines, bag and envelope fillers and sealers, tight wrapping machines, and paper box machinery. Through this acquisition, Food Machinery enters the dry packaging machinery field, and will be able to establish the S & S dry packaging equipment and set-up paper box machinery as companion equipment for FMC's food canning and packing equipment. This will augment FMC's line of liquid and semi-liquid food filling machines, as well as FMC's line of automatic nailing machines and allied wooden box making equipment.

Stokes & Smith facilities, located on a 10-acre plot in Philadelphia, include several well-equipped buildings comprising approximately 200,000 square feet of floor space.

Sterling Expands in Canada

Sterling Products (Limited), the Canadian division of Sterling Drug, Inc., has announced plans for expansion through its president, Henry L. Schade. The plans, put into operation August 1, involve rearrangement of certain operations. Sales in Canada of pharmaceutical preparations, packaged medicines, and household and toilet articles have doubled in the last six years, but facilities have not kept pace, according to Mr. Schade. New plans provide 17,000 square feet of additional manufacturing space, and put into effective use for offices and for shipping and warehousing activities 85,000 square feet in the building occupied by Frederick Stearns & Company of Canada, Limited, a Sterling subsidiary.

Operation in the Stearns building in Windsor, Ont., will be discontinued and manufacture of Nyal products, for Canadian distribution, will be transferred to Montreal. The business office of Nyal Company, Limited, will remain in the Windsor Stearns building under direction of Lloyd Darling, long associated with Stearns. Executive offices of Sterling Products (Limited) will be moved into the Stearns building from Elliott Street, the remaining space in the Stearns building will be transformed for shipping and warehouse operations. Through these changes, 17,000 square feet are made available in the Elliott Street building, which will be turned over completely to additional manufacturing operations or Sterling Products (Limited) and for Winthrop-Stearns, Inc.

Brewer-Wallace Labs General Mgr.

F. T. C. Brewer has been appointed general manager of Wallace Laboratories, Inc. He has been engaged in promotion of specialties to the medical and allied professions for a number of years, beginning in this field with the Prescription Products Department of the Borden Company. Later he was associated with Wallace & Tiernan Products, and H. W. Kinney & Sons.

Phillips Employees Reject Union

By a vote of 94 to 8, employees of the Gulfport, Miss., plant of the Chas. H. Phillips Co. Division, Sterling Drug, Inc., last month rejected a proposal to be represented in collective bargaining by the International Chemical Workers Union, No. 264, American Federation of Labor. The election was conducted under the auspices of the National Labor Relations Board.

Dr. Kitchen Elected to Society

Dr. Delmas K. Kitchen, medical director of Bristol Laboratories, has been elected a member of the Society of Investigative Dermatology, a group of

DR. D. K. KITCHEN

scientists whose work is directed along straight research lines in the field of dermatology, as applied to skin problems and skin physiology.

Henrietta Amos Resigns

Henrietta Amos has resigned from the Northam Warren Corporation as promotion-publicity director. Recently married, Miss Amos will make her home in San Francisco. Mariechen Wilder, formerly assistant to Miss Amos, has been appointed to succeed her as publicity director of Cutex, Peggy Sage, and Odorono.

Therapeutic Research Board

The Therapeutic Research Foundation has elected the following to the board of directors: Chairman, S. B. Penick, Jr., S. B. Penick & Co.; R. A. Cain, president and scientific director of the Institute; Lupton Patten, Chattanooga Medicine Company; Charles H. Pinkham, Lydia E. Pinkham Medicine Co.; Floy F. Johnson, S. C. Wells Co.; R. V. Pierce, Pierce's Proprietaries, Inc.; H. H. Hoyt, Carter Products Co.; S. M. Rising, J. H. Guild Co.; A. A. Reiff, Mentholatum Company; James E. Braun, Murine Co.; Fred J. Stock, Chas. Pfizer & Co.; E. W. Rose, Jr., E. W. Rose Co.; W. B. McFerran, Wintersmith Chemical Company. Elected to the board as public members and directors are Dr. Frederick J. Cullen, executive vice-president, the Proprietary Association; Dr. H. Evert Kendig, Dean, School of Pharmacy, Temple University; Dr. Robert L. Swain, Editor, Drug Topics. Recently elected as members of the Institute are Polk Miller Products Corp., Strong Cobb & Co., Od Peacock Sultan Co., and Seeck and Kade.

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CHEMICAL CONCOCTIONS

CSC points with pride... to the

CHEMICAL OF THE MONTH

STABLE · ODORLESS · WATER-WHITE

Specifications

Specific Gravity: 1.118 to 1.120 at 20°C./20°C.

Acidity: Not more than 0.01%, calculated as phthalic acid.

Water: No turbidity when one volume is mixed with 19 volumes of 60° Bé. gasoline.

Purity: 99% to 100% ester, by weight.

USES

Effective fixative for perfumes and essential oils!

Authorized denaturant for ethyl alcohol!

Excellent plasticizer for cellulose acetate and cellulose nitrate!

Unexcelled solvent for a wide variety of materials!

Properties

Molecular Weight: 222.23

Boiling Point: 296.1°C. at 760 mm. of mercury.

Flash Point: 151.7°C. (305°F.).

Melting Point: —40.5°C.

Weight per U. S. Gallon: 9.31 pounds at 68°F.

CSC For Detailed Information and Sample Quantities

WRITE OR PHONE

COMMERCIAL SOLVENTS CORPORATION · 17 E. 42nd ST., NEW YORK 17

C. I. B. S. Make Plans

By popular request the C. I. B. S. have decided to continue their regular luncheons during the summer, in addition to the regular golf outings. August 26 is the date of the golf meet, being held at the Dunwoodie Golf Club, Yonkers, N. Y. The entertainment committee also arranged a fishing party for members.

Since the purpose of the organization is to provide an opportunity for new salesmen and purchasing agents to get together informally, it was deemed advisable to nominate a committee to secure a well diversified representative group of new members. George Schumacher, Chesebrough Manufacturing Co., is chairman of this committee. Aiding him are L. W. Carter, Ogilvie Sisters; F. X. Hussey, Jr., Sales Affiliates; H. W. Maucher, Naugatuck Aromatics; and A. Mosheim, Jr., House of Tre-Jur.

Weinberg—Food Research Secretary

Jesse L. Weinberg has been named secretary of Food Research Laboratories. He will be comptroller and general manager of the business affairs of the laboratories, and will be in charge of personnel and public relations.

Pepsodent Appoints Luedke

William J. Luedke has joined the Pepsodent Division, Lever Brothers Company, as assistant advertising manager, according to Henry F. Woulfe, Pepsodent president. Mr. Luedke comes from the O-Cedar Corp., Chicago, and possesses wide experience in advertising and sales promotion.

Meyers Joins Roberta Roberts

E. Patrick Myers has been appointed sales manager of Roberta Roberts, Inc., New York manufacturer of notions and

PAT MEYERS

novelties. Mr. Meyers was formerly promotion manager for Le Sonier, Inc., and prior to that he was eastern division manager for Parfums D'Orsay.

Cincinnati Association Elects

Forrest M. Luckett, Monsanto Chemical Company, has been reelected president of the Cincinnati Drug and Chemical Association. Other officers to serve with Mr. Luckett for the year 1948-1949 are: Vice-president, Andrew W. Lincoln, the Wm. S. Merrell Co.; secretary, Walter M. Eller, Fritzsche Brothers; treasurer, Frank D. Nowland, the George H. Nowland Company; members of the Board of Trustees, M. J. Daly, M. J. Daly Company; Myron J. Hurney, Clopay Corporation; Tom K. Smith, Jr., Monsanto Chemical Company.

The new plant of the Reheis Company (formerly Schofield-Donald Company, Inc.) is located at Berkeley Heights, N. J. The move represents another milestone in the history and growth of the company which will soon celebrate its 25th anniversary. All facilities, including laboratories, offices and factory, will be housed in these new quarters which are on the D. L. & W. Railroad.

Three Schering Fellowships

Schering Corporation has established three clinical research fellowships under grants to leading medical institutions. The University of Montreal School of Medicine received a grant for renewal of the Schering fellowship in endocrinology. The work, under direction of Dr. Hans Selye, professor and director of the Institute of Experimental Medicine and Surgery, is near completion and important new findings are anticipated in the near future.

Two new fellowships have been initiated, one in medicine and one in endocrinology. The fellowship in medicine was created at the University of California School of Medicine, San Francisco, under direction of Dr. William J. Kerr, professor of medicine, and Dr. Laurence W. Kinsell, assistant professor of medicine, for study of the potencies and physiological effects of medication administered by various routes. At the University of Oklahoma, the fellowship in endocrinology was granted under direction of Dr. Henry H. Turner, associate professor of Medicine and associate dean of the faculty, for study of the beneficial effects which testosterone proprionate may have on spermatogenesis.

New Wetting Agent

A new synthetic surface active agent, said to be 224 per cent stronger than conventional types is being offered under the name Sulframin AB Concentrate by the Ultra Chemical Works, Paterson, N. J. This material is a very highly concentrated dodecyl toluene in small flake form. It is recommended for a wide variety of uses and in various industries including cleaning compounds, textile processing, insecticide-germicide-fungicide, laundries, leather processing, cosmetics and paper manufacturing.

Heyden Appoints Stern in West

George Stern has been appointed western sales representative of the Heyden Chemical Corporation, having charge of distribution and sales of all Heyden products in the Rocky Mountain region and Pacific Coast states. Prior to joining Heyden, Mr. Stern was associated with Westvaco Chemical Corporation, the U. S. Bureau of Mines, the A. R. Maas Laboratories, and the Barrett Division, Allied Chemical & Dye Corporation. His headquarters are at 420 Market St., San Francisco 11, Calif.

STANTON LABORATORIES

STANTON'S

"THIO"

As the foremost manufacturers of Ammonium Thioglycolate we are devoted to the unswerving principle of "PURITY IN TONNAGE."

Long-time and experienced users of Stanton's Ammonium Thioglycolate rely with complete confidence on our protected specifications and unvarying uniformity . . . Daily, the advantages of drawing on our skill and courteous service, are being discovered by the prominent manufacturers now requiring this important cosmetic base.

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Los Angeles, California

Navy Certificates Awarded

Certificates of Achievements were presented to 39 New York and New Jersey chemical, medicinal supply and manufacturing companies by Rear Admiral Arthur H. Dearing, Third Naval District Medical officer, at a ceremony July 15 at 90 Church St., New York. The awards were made in behalf of the Surgeon General of the Navy in recognition of services rendered the Medical Department of the Navy in the recent war. Among the recipients were: Acme Cotton Products Company, American Cystoscope Makers, Inc., Barnstead Still and Sterilizer Co., Becton-Dickinson & Co., Commercial Solvents Corporation, Cutter Laboratories, Inc., Davis & Geck, Inc., Eimer & Amend, G. G. Fischer & Co., Johnson & Johnson, Kny-Scheerer Corporation, Lederle Laboratories, Mallinckrodt Chemical Works, Merck & Co., New York Quinine & Chemical Works, Norwich Pharmacal Company, E. R. Squibb & Sons, the Upjohn Company, West Disinfecting Company, S. S. White Dental Manufacturing Company, Winthrop Chemical Co. and John Wyeth & Bro.

Doyle Joins Hile-Damroth

William T. Doyle has become associated with Hile-Damroth, Inc., Visual Analysts, New York, as sales consultant. Mr. Doyle, formerly of Lakeside Laboratories, will serve as a member of Hile-Damroth management and planning committees.

Clean-Be-Tween Appointment

Clean-Be-Tween Toothbrush Corporation of Los Angeles has appointed Hughs, Cussen & Stanger as sales representations, according to C. V. Torrence Clean-Be-Tween president. The brush, which retails at $1.00 with a fair trade minimum of 98 cents, has an adjustable head which permits reaching areas often inaccessible to conventional brushes. Brush head is replaceable, and refill-brushes retail at 35 cents, or three for a dollar. A direct mail campaign to dentists was recently started.

Manufacturers Give to Pharmacy School

More than $35,000 of the $50,000 necessary to install a pharmaceutical manufacturing laboratory for a new course in industrial pharmacy at the St. Louis College of Pharmacy, had been pledged late last month by major drug manufacturers, according to Robert L. Lund, president of the college. Contributions of laboratory equipment are also being donated by manufacturers. Companies pledging substantial amounts include Bristol-Myers Co., William R. Warner & Co., St. Louis Wholesale Drug Co., Od Peacock Sultan Co., Lewis-Howe Co. Equipment has been donated by Lederle Laboratories, Merck & Co., the Upjohn Co., Abbott Laboratories, and Lewis-Howe Co.

Joins Biophysics Labs

Leland Quick, for the past fifteen years vice-president of E. S. Miller Laboratories, has become associated with the newly organized Biophysics Laboratories, Inc., Los Angeles. The new company will manufacture hormone preparations for distribution to the medical profession. Dr. Leon J. DeMerre, who came to this country several years ago on a Hoover fellowship, is associated with the firm as medical research director. He also obtained other fellowships at the University of California (Berkeley), Rockefeller Institute for Medical Research (Princeton), Ontario Research Foundation (Toronto), California Institute of Technology (Pasadena).

S. K. F. Staff Changes

Smith, Kline & French Laboratories have made several changes in their organization. A. H. Burr has been appointed packaging engineer. R. B. Ferguson, in charge of New Building Engineering, has been placed in charge of the Engineering Department. E. R. Davis has been appointed head of the Industrial Engineering Department. E. L. Dame is now head of the Production Service Department.

Johnson Retires From Burroughs Wellcome

William S. Johnson, having reached the minimum retirement age, has retired as superintendent of manufacturing of Burroughs Wellcome & Co., Tuckahoe, N. Y.

Pop Eye

"Pop Eye," the familiar term for the Point-of-Purchase. Advertising Institute, has had some preliminary results from a survey it has been conducting in Rochester and Syracuse. This survey is being conducted by the Fact Finders Associates for the Institute.

A shampoo, a hair oil, a tooth paste and a tooth brush have been tested in 120 drug stores to check the influence on sales when point-of-purchase advertising is dropped.

The first month's rate showed a drop from 2 per cent to 20 per cent in sales under these conditions and then a jump from 60 per cent to 109 per cent when point-of-purchase advertising and store display were restored.

Department Stores

In the sharpest advance since 1932 in the cost of doing business in department stores, costs rose 2 per cent on sales in 1947. But even with these rising costs, department store earnings in 1947 stood at the second highest point on record.

These reports are taken from the annual study on operating results of department and specialty stores made by the Harvard University Graduate School of Business Administration in cooperation with the Comptrollers' Congress of the National Retail Dry Goods Association.

Other significant findings were:

(1) The dollar cost for each transaction rose from $1.01 to $1.18.

(2) The public bought 2.5 per cent fewer units of merchandise in 1947 than in 1946. However, the amount of the average sale increased 10 per cent, that is from $3.90 to $4.30. This 10 per cent gain in average sales did not meet the 15 per cent increase in retail prices.

(3) The rate of stock turn-over sagged for the second consecutive year in 1947, averaging 4.85 times in 1947 as against 5.25 times in 1946.

Arthur Littmann

Arthur Littmann, in charge of the bottling and labeling department of George Leuders & Co., New York, died at his home August 3. In December of this year Mr. Littmann would have celebrated his fiftieth year with the Lueders company.

Harry Marks

Harry Marks, comptroller of Van Dyk & Company, and Summit Chemical Corp., Beleville, N. J., died July 10. He was associated with Van Dyk for 20 years, being an expert on accounting for chemical manufacturing companies, and being frequently retained in a consulting capacity. He is survived by his wife, two children, and his father and mother.

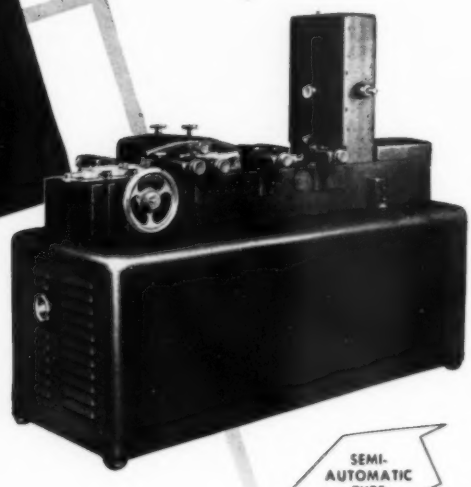
Ira J. Shapiro

Ira J. Shapiro, president and founder of the Ira J. Shapiro Company, wholesale druggists at 45 E. 11th St., New York, died July 17 in his home, 145 Central Park West, New York. He was 51 years old. Mr. Shapiro was president of the Allied Wholesale Druggists Association, and during the thirties he was a member of the fact-finding board of the industry in the NRA.

Save TIME, MONEY, LABOR

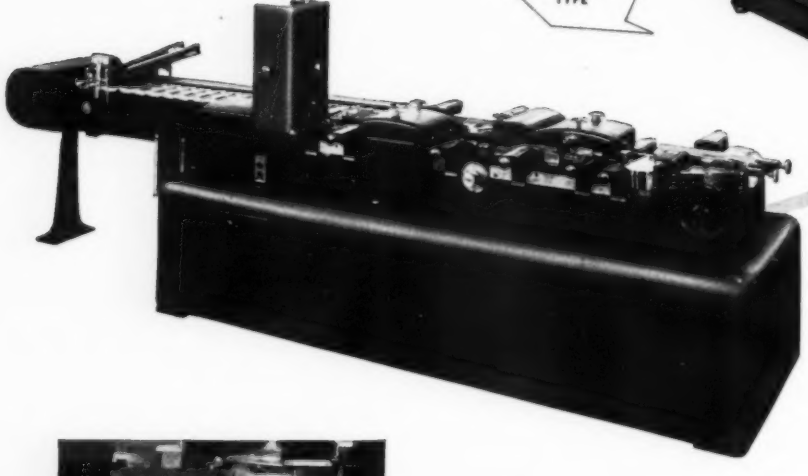
WESTERN PACKAGING EXPOSITION
See the Ross cartoner in operation at Booth No. 1
San Francisco Civic Auditorium, August 10-13, 1948

ROSS CARTONING MACHINES

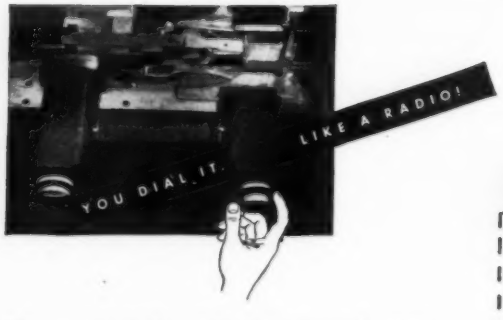


FULLY AUTOMATIC TYPE

SEMI-AUTOMATIC TYPE



Ross semi-automatic cartoner feeds folding cartons from the bottom of the magazine; erects, tuck seals one end and delivers them ready for hand filling or for delivery to a filling unit. A code dating attachment for printing on the side panel can be supplied. The operating range is from 100 to 200 cartons per minute.



Ross automatic cartoners save in two ways; first, through trouble-free operation at high production rates; second, by speedy changeover from one size carton to another, using the exclusive Ross dial control method of adjustment.

MAIL THIS COUPON TODAY

A-348

A. H. ROSS COMPANY, INC.
Subsidiary of Rockwell Manufacturing Company
Box 998, Dayton 1, Ohio

Gentlemen:

Please send me a copy of your latest bulletin describing Ross automatic and semi-automatic cartoning machines.

COMPANY_____

STREET_____

CITY_____ ZONE____ STATE_____

YOUR NAME_____ POSITION_____

Production Forum

By FRANCIS CHILSON
Industrial Consultant

How Far Expansion?

One of my good friends in the trade takes exception to what he calls my over-emphasis on preparation for expansion in all the articles I have written on plant design and modernization. He points out very reasonably that the majority of the firms in both branches of the trade have not expanded at a very rapid rate and some have not expanded at all in several years. He feels that I have been unduly influenced by the rapid growth of a relatively small percentage of the firms in the industry.

I am sure you appreciate that it is difficult if not utterly impossible in one article or in several to cover all exceptions to any thesis. It is true that some firms are growing very rapidly. Some are retrogressing slowly. Some have remained virtually static. It is obvious (and therefore needs no qualification) that all firms cannot expand all the time. In every established industry a period of saturation eventually is reached when demand for particular products is limited by the growth of the population; by the expansion of foreign markets and by the discovery of new uses for old products.

It can hardly be denied that the drug and cosmetic industry will be confronted within a generation with a leveling off period, when the growth of the industry will be relatively slow as compared with its growth during the past generation.

But this doesn't in the least invalidate my thesis from an individual point of view. When the saturation point is reached individual firms will continue to grow and expand at the expense of other firms in the industry. The total business never has and will never be proportionately divided. The firms which have the best management, the best research staffs and the best luck will continue to grow simply because they will take business away from competitors.

In the past we have had the underlying compulsion of an expanding economy which enabled many firms to grow and expand, which in a saturated, fiercely competitive economy, would have passed out of the picture long ago. There are hundreds of small firms in the trade—and some large ones too—which still are in existence simply because they are lucky enough to have been founded twenty-five, fifty or even longer ago. I venture to predict that twenty-five years hence the drug and cosmetic industry will be in the capable hands of *half* the number of firms engaged in it now.

I do not mean that the big, dominating firms will still be dominant then. I do not mean that no new firms will enter the field and become successful in spite of bloody competition. Neither do I mean that because a firm is small now it will be squeezed out of the picture in the next generation. As one who had had better than average contact with large and small firms throughout the trade, I will go on record as saying that large firms have no monopoly of managerial, research marketing brains and some are far from being models of efficiency. Likewise will I go on record as saying that a lot of small and medium sized firms will not be missed when they fall by the wayside, because they simply are parasites. Within the ultimate limits of the industry there always will be a constant change and flux in the fortunes of the firms that comprise it.

It is for this reason that I always have emphasized expansionist thinking—growth thinking, if you will. If you can't get business because a growing economy has provided an insatiable demand for you to supply then you've got to fight with all your power and intelligence to take it away from your competitors. That's the law of survival in a free enterprise system.

Hence, the small manufacturer really has greater need for intelligent management and efficient methods than the large one. The large manufacturer has vast economic power at his disposal and he has wide acceptance in the market. But simply because he has that power is no reason for the large manufacturer to rest smugly on his laurels or he won't be large much longer. The large organization with much capital and widespread reputation at stake and with a neces-

sarily diffuse management simply cannot move as fast as the small, aggressive manufacturer—and therein lies its Achilles heel.

The very thought that you are preparing for growth—for expansion–exerts a stimulating effect psychologically on you and on your organization. Such a maintained state of mind creates a condition of awareness which nurtures the seeds of growth within your organization and weeds out the seeds of death before they can sprout.

Hence, I tell all my clients large and small to lay their plans as if they anticipated growing at a very rapid rate regardless of economic circumstances and regardless of competition. Then the nuclei they set up will be right and if this attitude is maintained and remains the motivating force of all management policies such firms need not worry overmuch about the future.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Compression Molding Press

Rounding out their line of heavy duty plunger presses for transfer and compression molding, the F. J. Stokes Machine Company, 5932 Tabor Rd., Philadelphia, have come out with its 200 and 300 ton models. Designed particularly to handle high speed precision plunger molding of intricate work, such as insert jobs, and parts with thick or thin sections of projections, the new machines combine the basic features of the Stokes-Standard group with many new improvements.

All-around heavier construction is noted in the specifications, the overall weights of both the 200 and 300 ton maximum press capacity models being heavier than their predecessors! Forty ton injection pressure is available on the smaller of the two, sixty ton on the larger, with platen areas 26 inches by 23 inches and 36 inches by 28 inches respectively.

Both models feature the "toggle lock," which holds the mold shut during injection, minimizing the chance of the mold opening up and causing rejects when overloaded. In each case independent pressure control in both transfer and clamping cylinders is possible, combined with the patented bar type controller, provides great flexibility and simplifies changes in the molding cycle. Compact power units have simple, accessible hydraulic equipment and develop high ram speeds.

Coding and Marking Machine

A new machine, already in use in a number of plants for printing codes, batch numbers, expiration dates, contents information, and other variable markings on any shape of small rectangular and die-cut labels is offered by Adolph Gottscho, Inc., New York. This machine—the Corliss Coder—incorporates principles and features that enable it to effect extraordinary dollar savings. One pharmaceutical company which operates a battery of these machines, is said to report savings running almost into six figures, or almost $100,000, per year from this operation quite often considered insignificant in plant operation.

The savings are developed through the fact that the machine combines a number of new and exclusive features. For instance, the machine can hold a 10″ high stack of labels—practically a full hour's capacity—imprinting them without any attention by an operator, and shutting itself off automatically at the completion of the run. Also it delivers the imprinted labels in a single perfect stack, ready to feed directly to the labeler. This eliminates the need of assembling and restacking labels. The machine affords positive separation of labels, decreasing need for inspection after imprinting. One operator can service one or two Corliss-Coder machines simultaneously while also feeding a labeling machine, or can operate three imprinting machines continuously.

Any size or shape of label within the range of 9/16″ x ¾″ and 4″ x 3½″ can be imprinted. Complete changeover time is less than 10 minutes. Size of characters imprinted is 1/16″, and may contain up to 18 characters in a single line. The machine incorporates a vacuum-feed with mechanical imprinting action. It operates off a vacuum line with 18″ of mercury and draws 1 C. F. M. If required, vacuum unit is supplied.

Vacuum Filling Machine

Suitable for all shapes and sizes of glass and round cans is the bench portable vacuum filler in handling a large variety of liquids, introduced by the Scientific Filter Company, 1 Franklin Square, New York.

Filling takes place directly from barrel, drum or carboy placed alongside the bench. The machine will fill containers grouped on an open bench or in trays, or in original packing cartons.

An adjustable, light weight three spout filling head takes care of several different sizes of containers. Solid block heads with multiple spouts can be furnished for small containers like perfume vials and sample bottles, etc.

The spouts are equipped with adjustable rubber washers which seal the tops of the bottles at which time the vacuum thus obtained causes the liquid to flow into the containers. Excess liquid is withdrawn into an overflow jar mounted right on the base with the vacuum pump and motor. Fumes from corrosive liquids enter neutralizing trap thus preventing contact with the vacuum pump itself.

Filling head is equipped with an air vent which prevents dripping. Level of liquid in the containers being filled can be adjusted via the rubber washers on each spout.

Cleaning is quickly performed with the aid of water or solvent, taking as little time as five minutes, assuring a quick changeover to other odd lots.

ASK STOKES

Pretty Gals... some are born and some are made.....

More often than not they are made that way by using products packed or produced by Stokes Machines.

Lipsticks, compacts, toothpaste, facial creams, bath tablets . . . as well as hundreds of pharmaceutical preparations . . . flow by the billions from Stokes machines throughout the world.

Stokes Mixers for preparing ingredients, Water Stills for pure water, Vacuum Stills for processing, Tablet Machines for forming, Tube Fillers for packaging, are a few items among many in the Stokes line of processing equipment designed for the pharmaceutical and cosmetic industries.

Ask Stokes when you need help on problems of Cosmetic and Pharmaceutical manufacture. For more than 50 years Stokes chemists and engineers have been working with manufacturers to perfect the machines that make the products that make pretty gals prettier.

Write to
F. J. Stokes Machine Co.,
5932 Tabor Rd., Phila. 20, Pa.

FJS

Stokes makes Tablet Machines, Pharmaceutical equipment, Tube Fillers, Vacuum and Special Processing equipment, Vacuum Pumps and Gages, Plastics Molding Presses, Water Stills, and Special Machinery.

STOKES KNOWS HOW

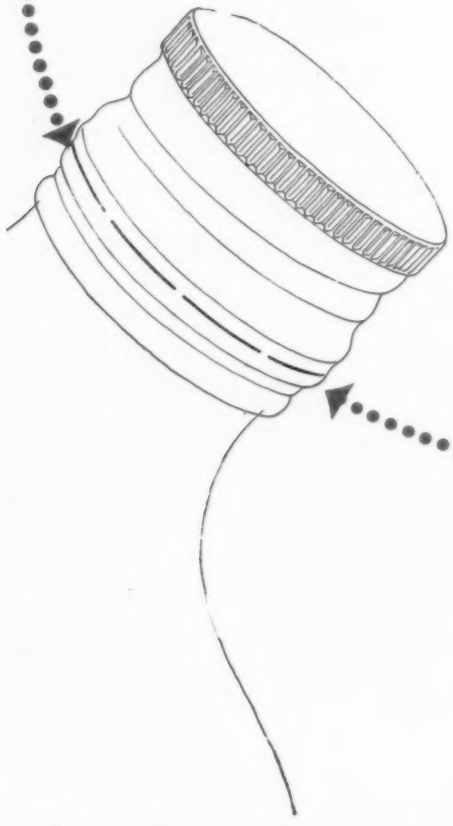
The seal that says "you're first"!

You can provide an *extra* margin of safety for your product by switching to Alseco Pilfer-Proof Caps. It's the attached locking ring that gives customers your guarantee of original quality. Once it is broken, it can't be replaced. Both longer-lasting aluminum cap and locking ring are rolled-on each individual bottle to make a perfect fit. Write for details about Alseco Pilfer-Proof Caps.

"Tailor-Made" to Fit Each Bottle

Under controlled pressure, the unthreaded cap is held down tightly on the sealing surface, embedding the lip of the bottle firmly into the cap liner.

While the cap is held down tightly on the bottle, rollers move in and *roll-on* the threads and pilfer-proof locking ring, using the bottle threads as a guide.



TAILOR MADE OF ALCOA ALUMINUM

ALSECO SEALS

AND SEALING MACHINES

ALUMINUM SEAL COMPANY, INC. • RICHMOND, INDIANA • SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA

Transco Interchangeable Hub 'Ld' Sheave

A new sheave introduced by the Transmission Machinery Corporation, P. O. Box No. 7823, Dallas, Texas, enables various diameter rims to be mounted on the same hub, and/or hubs of different bore to be mounted on the same rim. Heat treated socket head screws, held securely by lock washers, attach hub and rim together through template drilled holes in the rim web which assures complete interchangeability and quick mounting without special tools. Smaller diameter sheaves utilize fillister head screws. The hubs are bored to shaft size and keyseated. There are no bushings. Perfect fit and concentricity of bore with rim diameter is assured by machining shoulders of the hub and the web face. Sheave rims are made from light weight, stress free, semi-steel castings which are machined and balanced carefully to assure maximum belt life. The sheave are now available for drives serving 1/3 to 10 horsepower, and may be obtained in one, two, and three grooves for "A" section belts, also in combination grooves for "A" or "B" section belts in sizes from 2.2" P.D. to 18.4" P.D.

Laboratory Mill Bulletin

An illustrated bulletin entitled "Improve Your Laboratory Set-Up with an Improved Mikro-Samplmill," has been issued by Pulverizing Machinery Company, 141 Chatham Rd., Summit, N. J.

The features of the new Mikro-Samplmill for pulverizing analytical samples of materials and mixtures up to 7 per cent of free moisture, are described in detail in text and illustration. Among the points described are such features as, assurance against contamination, reduced cleaning time, maximum recovery and adequate capacity.

The simplicity of the new unit and the ease of making necessary replacements, are fully covered. Emphasized is the fact that this laboratory unit, which is available in bench and floor models, will grind materials that can later be processed in production runs on larger pulverizer units.

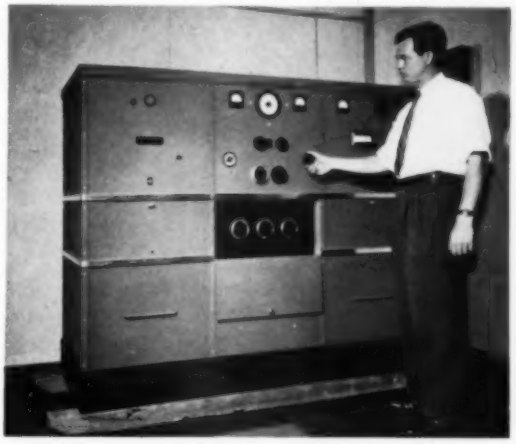
Self Contained Ultracentrifuge

Characterized as a research tool for the centrifugal purification and molecular-weight determination of particles in the larger molecule size range, the Spinco Ultracentrifuge offers a unified design housed in a single enclosure and ready for full operation with the simple connection of power and cooling water. Sound insulation is not required because the unit is proved with a quiet electric drive.

Essentially, the machine consists of means for driving various types of rotors at adjustable constant speeds up to 70,000 rpm, together with associated controls and related apparatus for measurement and observation of conditions relative to the sample under observation. These include, an optical system of the refractive index type with viewing screen for studying the material being centrifuged; a high-intensity H6 mercury-arc light source, a camera for permanent records, either automatically or manually-operated; high vacuum pumping equipment for evacuating the rotor chamber to a vacuum below 10-3 mm Hg; a refrigerating system for the maintenance of reduced rotor temperatures, and complete controls and safety interlocks. Maximum centrifugal force which can be exerted on the sample is 260,000 times gravity.

Developed by Dr. E. G. Pickels, the Spinco Ultracentrifuge is indicated as being particularly adaptable for work on particles from 1 micron down to a few thousandths of a micron, a range encompassing the major virus and protein groups.

For further information write Specialized Instruments Corporation, 1118 O'Neill Ave., Belmont, Calif.



Yale Dial Scale Mechanism

The Magnetrol, a new dial scale mechanism recently introduced by The Yale & Towne Mfg. Company, Philadelphia division, offers (1) a straight line relationship between the platform load and pointer movement without specially filed cams, adaptations to prevent backlash or delicate adjustments of the angular relationships between sectors, (2) a reduction of service adjustments from the usual six or seven to only two and (3) full but light engagement between the pointer rack and pinion by means of a permanent magnet. Also noteworthy is the fact that all moving parts are mounted at three fixed centers in a single gray iron casting (the most dimensionally stable of many materials considered).

The capacity of the mechanism under direct loading without any lever system is 25 pounds, its application to large industrial loads, up to 50 tons is a matter of lever linkage. Its guaranteed accuracy is one part in 1000, but accuracies of one part in 2000 are readily obtained. The dial head, which contains a 20-inch diameter reading lines dial chart, can be swiveled through 360 degrees.

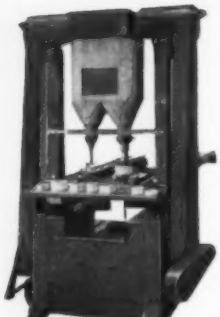
The mechanism is amply protected from moisture, water, dust and neglect. The dial head is sealed by

US

Manufactures Machines For

NET WEIGHING
GROSS WEIGHING
PACKING
PACKAGE FORMING & FILLING
CARTONING
CARTON SEALING
CARTON LINING
CARTON WRAPPING
PAPER BOX FORMING
PAPER BOX COLLAPSING

. . . they chose US



Model MH "BOND" Semi-Automatic VOLUME FILLER, WEIGHER OR PACKER

The fillers of the bottles illustrated chose the MH Bond Semi-Automatic Twin Station Filling Machine because they use a great number of container sizes in packaging a wide range of materials. The MH Bond can be easily and rapidly converted to suit each of these numerous products and containers. It is the ideal machine to volume fill, gross-weigh or pack such products as ground spices, powdered drugs, talcum, flour, soap powder, cocoa, etc. And, the MH can pack each in the most desirable containers—whether they are boxes, cans, bags, jars, envelopes or cartons.

The model MH is a speedy and precise twin station machine requiring but one operator. It can fill up to 40 containers per minute, with negligible variations in the packed weight.

The MH Bond is but one of several filling machines manufactured by **US**. Other models include semi-automatic and automatic, one, two, and four station machines—among them is the most profitable solution to your packaging problem—write **US** today.

NET & GROSS WEIGHING · PACKAGE FORMING & FILLING · CARTONING SEALING LINING WRAPPING · PAPER BOX FORMING & COLLAPSING

US Automatic Box Machinery Co., Inc.

45 ARBORETUM ROAD, BOSTON 31, MASS.

OWNING AND OPERATING NATIONAL PACKAGING MACHINERY CO. · CARTONING MACHINERY CORP.

Branch Offices NEW YORK · CLEVELAND · CHICAGO · LOS ANGELES (KRUCH EQUIPMENT & SUPPLY CO.)

rubber gaskets at the dial glass and back plate, and by oil at the column connection. Locking of the mechanism to prevent any possible damage from shock loads and such is accomplished with a single flip of a hand lever which secures the pendulums in fixed neutral positions, and lifts the draft rod so that load cannot be communicated to the draft hands.

Controlled Volume Chemical Pump

For use where electric power is not available a new chemical pump in Simplex and Duplex models, powered by a one H.P. rotary air motor, is being offered by the Milton Roy Company, 1302 E. Mermaid Rd., Philadelphia 18, Pa. This "Airometeric" pump is powered by natural gas or compressed air as the prime mover, at air pressures from 50 to 80 psi. A pressure regulator and indicating gage are supplied with each unit to reduce the supply pressure to that required for pump operation.

Maximum pumping capacities are (Simplex) from 1.2 to 75.5 gph., (Duplex) from 2.4 to 151 gph. Maximum discharge pressures ranges from 115 to 9500 psi., varying with the volume of liquid pumped. Pumps will operate efficiently at any discharge pressure. Liquid ends furnished are the same positive displacement Step-valve construction as used in electrically driven Milton-Roy Pumps and are in iron, steel and alloy metals to meet practically all corrosion resistant requirements. Pumps are accurate metering units affording precise control of volume of liquid pumped to as little as one pint per hour.

Applications include the pumping of chemicals in controlled volume and in small quantities, the handling of difficult or corrosive materials, pumping chemicals into flowing oil wells to minimize corrosion, pumping treating chemicals into boilers or boiler feed water lines or any other purpose where a chemical electric current is not available. Another application is in processing operations where explosion hazards prohibit the installation of electric motors. These units are also applicable as components in chemical feed systems for automatic pH control and similar automatic proportioning purposes.

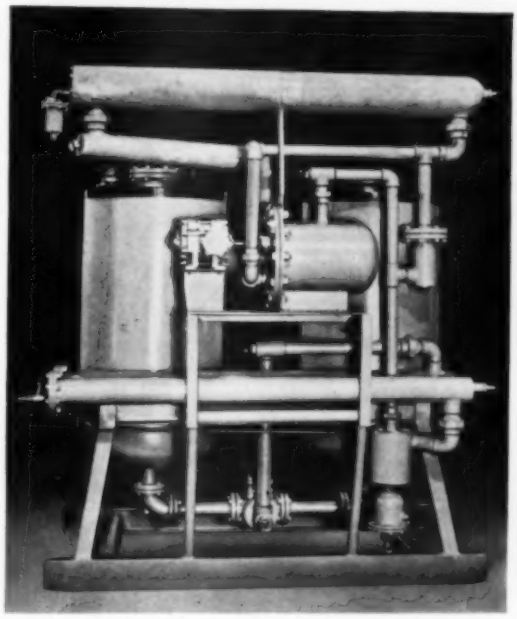
"BY" Line Introduced

Pittsburgh Lectrodryer Corp., manufacturer of dehumidification equipment, announces that it has started production on a new line of machines primarily designed for drying instrument air.

Lectrodryer engineers describe the new equipment as fully automatic which makes possible the reactivation, cooling and reversal of the machines' dual adsorber towers without manual attention.

Because of the machines' compactness they will require considerably less space than that occupied by manually operated dual adsorber Lectrodryers of comparable capacity. Also stressed is the fact, that the "BY" line as it is called, will be more economical than previous models.

The "BY" instrument air dryers are to be built as standard for operation on pressures up to 150 p.s.i.g. with the purchaser given the option of either steam or electric reactivation. Machines for operation at higher pressures will be made available on specification. But all are designed with special attention to simplicity and reliability with the only moving parts being the reactivating pump and valve reversing mechanism.



Like other Lectrodryer machines, the "BY" line removes moisture from air and gases by means of the physical phenomenon known as solid adsorption. The Corporation employs activated alumina as the drying agent in all its equipment.

Additional information as to the new line may be obtained by writing Pittsburgh Lectrodryer Corp., P. O. Box 1766, Pittsburgh 30, Pa.

Akro-Mats

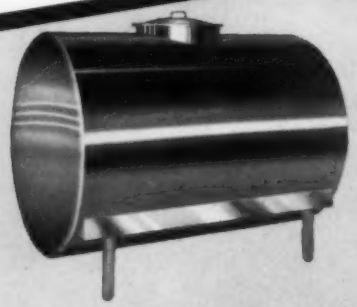
Corrugated mats of especially compounded rubber links woven on twelve guage spring steel wire provide sure, comfortable footing to stop slipping accidents and reduce worker fatigue.

Akro-Mats are particularly adapted for use where moisture, oil, fats, acids, chemicals, solvents and abrasives are apt to be on the floor as the rubber resists deterioration. They are easy to clean and easy to handle, lay flat or roll up.

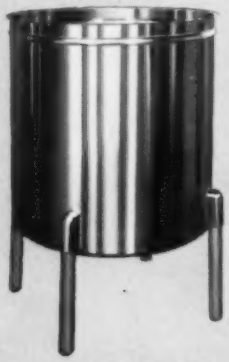
Recommended by safety engineers, these mats assure under foot protection on walking surfaces, loading platform, elevators ramps, landings, etc.

The mats are economically priced and available in any desired length and widths up to 48 inches. For more information, write to the General Scientific Company, 2700 West Huntingdon St., Philadelphia 32.

All the Requirements FOR LIQUID PROCESSING



TYPE "H." A mixing or storage tank recommended for low headroom installations.



TYPE "J." A modern design open-top San-I-Tank.

TYPE "K." Closed top tank for mixing or storage.

TYPE "L." Large capacity and low sides for shoulder height operation.

TYPE HALF ROUND. An ideal storage vat for processing liquids or foods.

STOCK POTS. Sturdy, stainless steel utility pots.

are in STAINLESS STEEL SAN-I-TANKS

- A COMPLETE LINE
- STREAMLINED DESIGN
- PRACTICAL CONSTRUCTION
- EASY OPERATING
- SELF DRAINING
- LOW COST

Send today for your free copy of Bulletin SS-48. Contains full information, specifications and data on Single Shell SAN-I-TANKS.

Thousands of industries throughout the world are using SAN-I-TANKS to meet their liquid processing requirements. Whether the operation is mixing, blending or storage . . . in tank capacities from five to 5,000 gallons . . . there's a SAN-I-TANK to handle the job.

Experience gained through many years in the tank fabricating industry has resulted in a complete line of modern SAN-I-TANKS. Durable, stainless steel construction assures long-term service and top operating efficiency that meets every sanitary requirements.

SAN-I-TANKS also feature a full line of accessories including motor-driven agitators, sanitary flush valves, faucets and covers.

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STAINLESS STEEL SAN-I-TANKS

SERVING THESE INDUSTRIES: BEVERAGE • MILK • FOOD • DRUGS • CHEMICALS • COSMETICS

METAL GLASS PRODUCTS COMPANY

GENERAL OFFICES — BELDING 2, MICHIGAN

Shipping Booklet

One of the most significant phrases in industry today is "OK on Delivery," the tell-all stamp of approval which briefly indicates that delivered merchandise has successfully weathered handling from producer through shipper to consumer. But all too frequently, according to The Shipping Container Institute, 475 5th Ave., N. Y., damage resulting from carelessness on the part of either the boxmaker, shipper, or carrier places burdensome and unnecessary costs on the collective balance sheet of industrial America.

The Shipping Container Institute has prepared a booklet. Entitled "OK on Delivery," it is a presentation of the principal damage causes that shippers are in the best position to correct, and explains how they can go about it.

The booklet lists seven Shipping Container Enemies, and offers suggestions which shippers can use to overcome them. Pictorially described as the seven Enemies are: 1) uncovered freight car floor racks, which dent, crease, and rip fibreboard containers;)2 the failure to remove protruding nails, pieces of strap, lumber, or wire left in the walls and floors of the freight car from previous shipments; 3) loose loading; 4) inadequate bracing; 5) incorrect car door blocking; 6) dirty cars; and 7) poor cargo arrangement and overloading.

Double Drum Dryer

The F. J. Stokes Machine Company, 5932 Tabor Rd., Philadelphia, has designed an atmospheric double-drum dryer in an attempt to banish many of the faults found with previously available equipment. This new machine is easily cleaned, quickly adaptable to different production uses, and simply operated by semi-skilled labor.

Welded steel is used for end frames, doctor knife assemblies, etc., and rounded corners and sloped surfaces prevent dust and dirt accumulations. While working parts are all easily accessible because of the end-frame construction, virtually all moving units are sealed within the main housing. Such construction, plus the fact that conveyor troughs can be inverted, makes it possible to wash down the machine without getting water where it doesn't belong.

The angle of the doctor knives and the knife pressure along the drum face are adjusted by conveniently located controls. The drums are cast from special alloys and treated to assure maximum dimensional stability. Protection from damage to the drums by hard particles or foreign matter passing between the rolls is accomplished through the use of suitable quick-acting pressure releasing devices.

Drum drive speeds are variable by either mechanical or electronic controls that are protected against overload. Journal bearings are of the anti-friction type, equipped with labyrinth seals, force-feed oil lubricated, with oil circulating systems protected by ample storage-tank, filter and oil cooler.

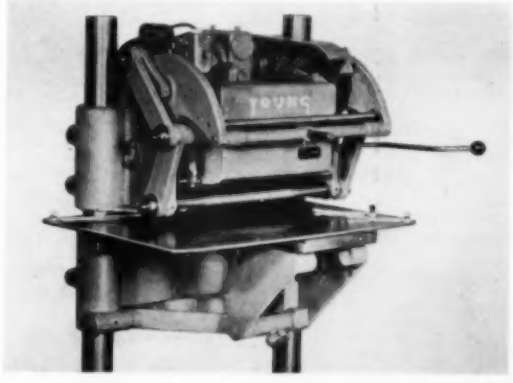
To suit special needs there are many features and appliances available with these new Stokes double-drum dryers. Several types of bottom feed systems can be incorporated with accurate liquid-level controls, and patented devices used with top-feed systems assure even and continuous feeding. In some cases the use of vapor hoods and plenum chambers is called for to control dust. Total enclosures may be had if toxic materials are to be handled. A variety of metals can be specified for the construction of drums, shields, conveyors, vapor hoods, total end closures and end boards.

Air Filter

An electronic air filter has been developed by American Air Filter Co., Inc., Louisville, Ky., with an intermediate cleaning efficiency for applications where the efficiency of a mechanical filter is too low and that of an electronic precipitator is unnecessarily high. The new filter is basically an electronic precipitator without an ionizing unit and contains a collector element of electrostatically charged airmat paper. This paper is a laminated cellulose product composed of plies of porous, tissue-like sheets formed of short fibres in jack-straw arrangement. Also it is used as a filtering medium in mechanical filters. When an electrostatic charge is applied to the paper, the plies tend to separate and each individual fibre becomes a collecting electrode which attracts and holds dust and smoke particles. This action doubles the cleaning efficiency of Airmat paper. Electro-PL will continue to function as an air filter when deenergized, its operation may be varied to suit the dust condition, as an electronic air cleaner during the winter months when a smoky atmospher prevails, and as a dry-type air filter during the summer months.

Carton Printer

The purpose of the Young Carton Printer is to provide users of cartons, who, because of the nature of their business, are unable to buy printed cartons in advance, a means of printing their own cartons. It prints from rubber, either type, logotypes, or engraved dies. The type holds and master die plates are of adjustable styles, allowing for variations of arrangements



in composition. The printer can be used for marking K/D or empty cartons with bottoms made up, used with a table bed for K/D and without for made up cartons. It is so simple to operate that anyone who can read can use it.

The U. S. SEMI-AUTOMATIC *Model B-2* VACUUM FILLER

The most popular semi-automatic filler in America. Rapid filling of any liquid or semi-liquid. No lost motion, idle machine time or product waste! Fills 2 containers simultaneously. Fills directly from any size storage container. Interchangeable filling stems. Fills AGST and ordinary neck opening containers up to 4″ diameter. Invaluable to plants of hand-filling capacity. Widely used also in large plants as a stand-by unit. It is portable, plugs into electrical outlet for quick use anywhere. Write for the "B-2 Bulletin."

OTHER U. S. FILLING UNITS:

- ✓ **Fully Automatic U. S. Rotary Vacuum Fillers handle any free-flowing liquids, light or heavy, foamy or syrupy. Made in many sizes. Can be operated at variable speeds. Made in 5 sizes.**
- ✓ **U. S. Syphon Filler for accurate and rapid filling. Filling operation is automatic, while moving containers is a simple hand operation. Handles every type of free-flowing and low viscosity liquid; for containers from miniatures to gallons. Requires no power connections.**

Whatever your filling requirements may be, U. S. engineers can recommend and supply the most ideal units to fit your needs.

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PUMPS
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WASHERS
CORKERS
FILLERS

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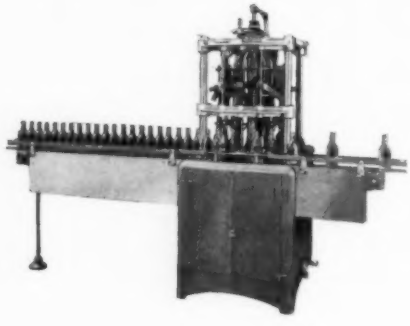
LOWER YOUR PACKAGING COSTS
GEAR YOUR PRODUCTION

FOR HIGHER PROFITS • EFFICIENT FILLING



mrm *FULLY AUTOMATIC ROTARY FILLER*
FOR VISCOUS • FOAMY • STILL LIQUIDS

WHY AN mrm ?

VERSATILE—Adjustable to glass and metal containers, all shapes and mouth openings, including sprinkler top bottles and open top cans.

CAPACITY—Adjustable to glass containers—one half oz. to one gallon, metal to one quart.

PRACTICAL, SIMPLE DESIGN—Eliminates skilled maintenance.

STURDY CONSTRUCTION—Designed and built for many years of productive service.

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PROMPT DELIVERY!

WRITE FOR DETAILS

- **MODERATELY PRICED TO REACH *ALL* MANUFACTURERS**
- ***NO SKILLED OPERATION OR MAINTENANCE NEEDED***
- **PARTS ARE SIMPLE—FEW—INEXPENSIVE**

CONSULT US ON YOUR PACKAGING PROBLEMS

mrm CO. INC. Dept. DCI58
custom designed and built fillers and conveyors
191-193 Berry Street, Brooklyn 11, N. Y.
EVergreen 7-3936

Here is FLEXIBILITY in Mixing

GLEN "340" MIXERS

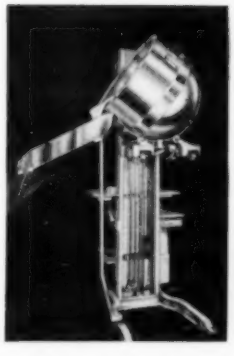
Mix Everything from Light Foam Latex to Heavy Abrasive Paste

These large capacity, flexible mixers with economical, heavy duty drive, fingertip variable speed control, and interchangeable bowls and beaters yield big volume production and cut costs whenever and wherever installed.

Pre-loading of Interchangeable Bowls Makes Mixing Practically Continuous

Steam-jacketed bowls, completely covered bowls for dust control, as well as other accessories are available.

MEETS EVERY UNLOADING REQUIREMENT



1—With the AMF Glen Bowl Unloader, the operator presses a button and the bowl is raised and automatically tilted, pouring its contents into a depositor at a controlled rate of flow.

2—A special bowl tilting truck is available to pour the contents through a hole in the floor to a depositor below.

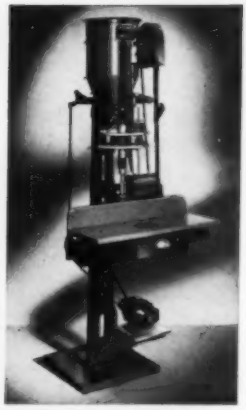
3—A gate can be provided on the bottom of the bowl for discharging contents onto a continuous conveyor belt.

AMF GLEN MIXERS *are available in 120, 160 and 340-quart capacities. For complete information and specifications, write American Machine & Foundry Company, 485 Fifth Ave., New York 17, N.Y. Ask for DM-302.*

GLEN *Industrial* **MIXERS**

Profitable Productive Packaging

with
TRIANGLE
VOLUMETRIC FILLERS
accuracy
simplicity
versatility



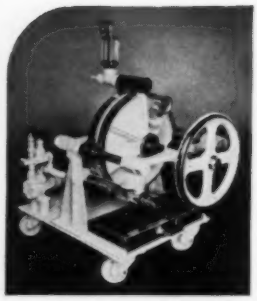
Left—TRIANGLE Model SPA Volumetric Filler. Packages dessert powders, chemicals, spices, powdered drugs, and many other items neatly, accurately and economically. Quickly and easily adjusted to handle a wide variety of dry products for packaging in bags, jars, envelopes or cartons. One operator can produce from 30 to 60 packages per minute, in sizes ranging from 1 to 16 ounces. Equipped with an automatic plunger which assures positive discharge from measuring chambers. Write for literature.

Left—An improved, inexpensive table model machine—the TRIANGLE P-1 Volumetric filler—designed to package all types of powders in various style containers. Available in several different models for handling packages from ¼ ounce to 16 ounces, at a rate of 20 to 50 packages per minute. Simple adjustments provide for changes in filling speed or volume of materials. This is an ideal machine for speedy, efficient, low-cost packaging. Write for literature.

TRIANGLE also builds a complete line of high-speed automatic and semi-automatic weighers, fillers and carton sealers. Ask for detailed information.

TRIANGLE PACKAGE MACHINERY CO.
929 NO. SPAULDING AVENUE, CHICAGO 51

Sales Offices: New York, Pittsburgh, Jacksonville, Los Angeles, San Francisco, Memphis
Branch Factory: Los Angeles



A Small Capacity Filter ...BY ERTEL

Here's the ideal Ertel engineered filter for small capacities. Known as Model EBW, it is built with 3 gpm pump. Has single hand wheel for effortless tightening. Whether your requirements can be met with this unit or with a special unit from the complete line of Ertel Filters, Ertel engineers are always ready to help you solve your liquid handling problems. Catalog 15 was recently off the press.

May we send you a copy?

ERTEL
LIQUID HANDLING EQUIPMENT
ERTEL ENGINEERING
CORPORATION
KINGSTON NEW YORK
New York City Sales Office: 40 West 48th Street, New York 19, N. Y.
ASBESTOS FILTER SHEETS • ASBESTOS SHEET FILTERS
BOTTLE FILLERS • PORTABLE MIXERS • PLASTIC PUMPS

Use LABELS AND SEALS
FAITHFUL by SERVICE
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FOR OVER FIFTY YEARS
for greater sales appeal
METAL · EMBOSSED
ENGRAVED
DIE STAMPING FOR BOXMAKERS

EPPENBACH HOMO-MIXER MAKES DISPERSIONS WITHOUT INCORPORATING AIR

1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
2. Inflowing "slurry" is violently agitated at high velocity and projected upward toward surface.
3. A submerged baffle-plate deflects the rising current horizontally toward sides of tank, thence flowing downward toward bottom.
4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
5. The entire batch is deflocculated resulting in a perfect dispersion.
6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

The Eppenbach HOMO-MIXER is built on an entirely new principle. Whereas ordinary mixers create a vortex in the material that pulls in air, the HOMO-MIXER draws only from the bottom of the tank. Entrapped air tends to cause separation and splitting, and frequently oxidizes the product.

Furthermore, the HOMO-MIXER does not require a high head of liquid to give efficient mixing action. It is possible to process material in a tank at a depth just great enough to cover the mixing head. Fits tanks of all types and shapes . . . no clamps required . . . no special angle of installation.

Write for complete details of this mixer—"the only one of its kind." Ask for Catalog No. 402.

Eppenbach HOMO-MIXERS are available in a complete range of sizes for laboratories and production plants. Capacities range from 2 to 2,000 gallon batches from ¼ to 25 H. P.

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45-10 Vernon Blvd., Long Island City 1, N. Y.

EPPENBACH INC.
Processing Equipment for Over 30 Years

The Heart of a Packaging Operation . . .

Skillful use of present day packaging materials make modern packaging the marvel of the age that sells goods in volume never before attained. But the heart of any volume packaging operation is still the scale. All the window dressing at your disposal will not assure a uniform package. It takes an EXACT WEIGHT Scale to do that. The facts are you package much of your profit with the overweight package while underweight container is under fire from many quarters. Check weighing is just good business . . . it's the heart of any drug and cosmetic packaging operation from a profit standpoint, due generally to the high value of the product . . . it's the answer to uniformity of carton. Remember the uniform package is what it is supposed to be . . . no more, no less. Write for full details for your business.

EXACT WEIGHT Shadograph—a revolutionary new principle in precision weighing, substituting a light ray for mechanical indication. Electrically operated, noiseless in use, high speed operation, extremely high accuracy. Ideal unit for fine compounding of exacting formulae. Excellent equipment for high speed production line checkweighing. Unit can be supplied with scoop or platter as ordered. Capacity and visible accuracy to specifications of the operation.

INDUSTRIAL PRECISION
Exact Weight Scales

THE EXACT WEIGHT SCALE COMPANY
950 West Fifth Avenue, Columbus 12, Ohio
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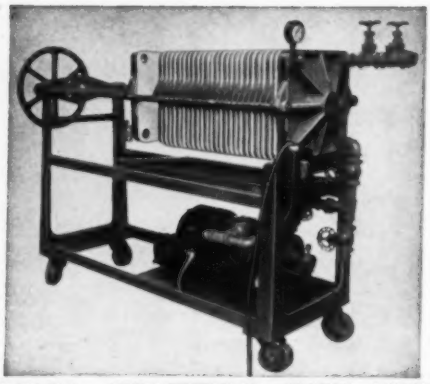
A NEW COLTON ROTARY TABLET PRESS
SERIES 200-25 ROTARY TABLET PRESS

The design of the Series 200-25 Tablet Machine is an outstanding engineering achievement, the culmination of years of experience in building tablet machines. This compact machine incorporates refinements that provide an entirely new standard of performance for this type of equipment.

ARTHUR COLTON COMPANY

2620 East Jefferson Established 1884 Detroit, 7, Mich.



HORM FILTERS

HORM ASBESTOS FILTER PADS

Horm Filters for filtration, clarification, polishing, are designed so that no liquid can by-pass the filter element. They are unsurpassed for drug, chemical and cosmetic preparations.

CLARIFLOW

- No rubber washers used
- Adaptable to all types of filter mediums
- Rapid change of filter pads
- Construction Stainless Steel or Bronze (nickel plated)
- Suitable for coarse and fine filtration, including germproof and ultra-fine

HORM ASBESTOS FILTER PADS FOR EFFECTIVE FILTRATION

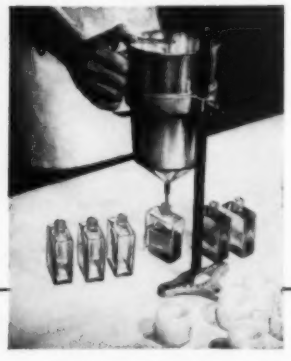
STERILFLO

TRADE MARKS REG. U.S. PAT. OFF.

F. R. HORMANN & CO., Inc.

186 JORALEMAN ST., BROOKLYN 2, NEW YORK
Plant: 30 Sea Cliff Ave., Glen Cove, L. I.

HAGERTY



hand jar and bottle filler

For the manufacturer who needs fast, accurate, spill-proof hand fillings. Flow of liquid or cream controlled by simple, hand-operated valve.

- Pint, quart, half-gallon, gallon sizes (Metal stands at extra cost for larger sizes)
- Available in tin, monel metal or stainless steel
- Easy operation
- Moderately priced

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Class containers since 1849

The World Known

"TWIN FILLER"

for Gravity-Vacuum-Pressure

is back again

Rapid and accurate filling brought within the reach of everyone. Contains many of the features of large and costly machines. Will fill bottles in straight line manner as well as in your own packing trays. Foot operated.

Inquire about our

Straight Line Bottle Filling Machines
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Automatic Filling Valves
Bottle Emptying and Cleaning Units

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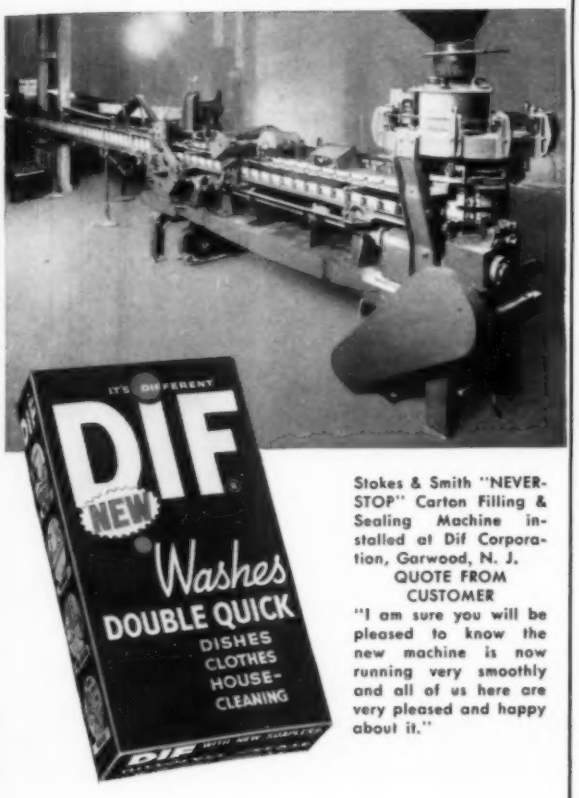
72 JAY STREET, BROOKLYN 1, N. Y., MAin 4-0165



Stokes & Smith "NEVER-STOP" Carton Filling & Sealing Machine installed at Dif Corporation, Garwood, N. J.

QUOTE FROM CUSTOMER

"I am sure you will be pleased to know the new machine is now running very smoothly and all of us here are very pleased and happy about it."

This machine feeds the cartons from a supply—bottom seals, fills and top seals—60 to 70 packages per minute all on the one machine. Continuous motion—High production.

OTHER STOKES & SMITH MACHINES

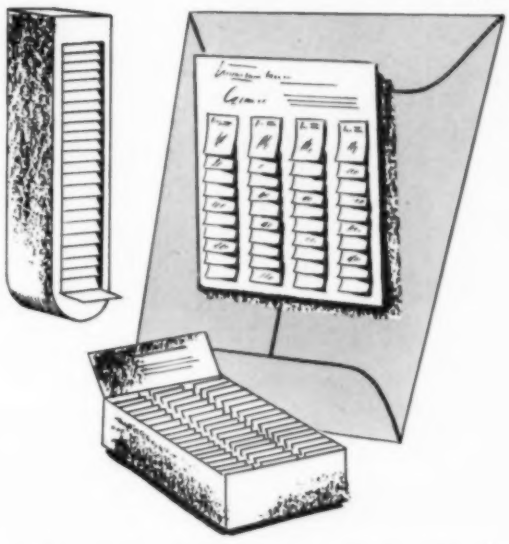
FILLING • SEALING
PACKAGING
WRAPPING
"SPEEDS TO SUIT YOUR NEEDS"
Write for complete information

STOKES & SMITH Co

PACKAGING MACHINERY — PAPER BOX MACHINERY

4912 Summerdale Ave., Philadelphia 24, Pa., U. S. A.

BROWN PACKETS BUILD NEW *Points of Sales*



Modern merchandising requires your product to stand out "in a crowd". Boost new points of sale of your dry, free-flowing drugs or cosmetics by packeting in Brown open-end envelopes. Displayed on racks, counters and cards, Brown packets attract more prospects where your regular sized packages may not be carried.

Brown packets are made to your specifications, precision sealed at the bottom and along the back, with uniform open ends for fast, accurate filling without waste. They are true miniatures in quality, design and appeal of your large regular sized packages.

The story of drug and cosmetic Brown Bag open end envelope successes is yours for the asking. Send for a complete assortment of Brown Bag packets which have established profitable and new consumer markets, and the factual details of these successes.

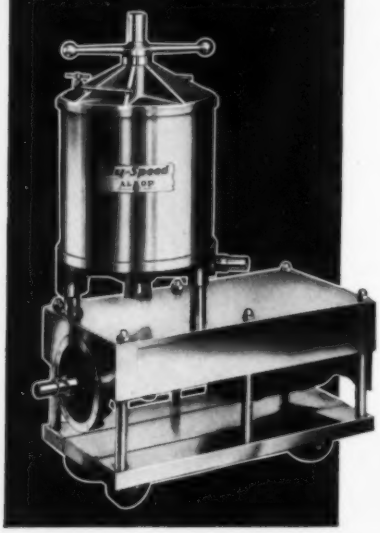
BROWN

BAG FILLING MACHINE CO., INC.

FITCHBURG, MASS.

West Coast Reps., Peter D. Bowley & Assoc., 210 Mississippi St., San Francisco, Calif.

It's an
ALSOP
FILTER



For EASY HANDLING
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COMPACT, PORTABLE, COMPLETELY SEALED

Alsop "*Sealed-Disc*" Filters are engineered in every way to provide positive results in the quality and quantity of filtration as well as economy in operating and maintenance costs.

They are completely enclosed and leak-proof, operation is instant and uniform, their simplicity and portability assures convenience and speed in handling. "*Sealed-Disc*" Filters have proved equally effective on intermittent and continuous operation—for clarifying, final polishing and for removing turbid matter on—chemicals, drugs, liquid soaps, perfumes, alcohol, extracts, cosmetic preparations, animal and vegetable oils, etc.

Built of Stainless Steel, Monel Metal, Nickel-plated Brass, Bronze or Iron and Steel in a complete range of sizes and capacities from small bench models for small production and experimental work to thousands of gallons per hour units for large volume production.

Write for complete information.

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Filters, Filter Discs, Pumps, Tanks, Mixers, Agitators

Ready for Action!

THE NEW
Barnstead UPFLO Demineralizers
The newest and easiest way to get de-ionized water

If you need highest test mineral-free water at lowest cost, these trouble-free units are the simplest and most convenient to operate. Regeneration time is cut nearly in half by eliminating backwashing and reducing valve operations. Barnstead UPFLO Models are so compact they take little floor space and are exceptionally easy to install. Just connect to water and waste lines. Unit comes completely set up with all interconnecting piping, valves, etc. Regenerating tanks are built in, and resins are in columns ready to operate.

- *Compact package unit, completely assembled.*
- *UPFLO principle gives higher purity.*
- *Costs only a few cents per 1,000 gals.*
- *No backwashing—cuts regenerating time in half.*
- *Contains built-in automatic control light.*

First in Pure Water since 1878

Barnstead
STILL & STERILIZER CO. Inc.
7 Lanesville Terrace
Forest Hills, Boston 31, Mass.

YOUR TRADE-MARK RECORD

By JOHN H. GRAHAM
International Patent and Trade-Mark Consultant

SHOULD ethical drugs have their faces disfigured by trade names? A mighty question that! Over the years I have heard it debated but with little decision just like the age old question as to whether new drug formulas should be patented. The question of trade-marks for drugs came up the other day.

A doctor friend of mine was asking about my sinus (this humid weather). Just over a year ago I successfully cleared it up by using the now well-known aerosol-penicillin treatment.

When I was using it we first tried oil solutions direct of penicillin with the usual oxygen-air means to disperse it through a nozzle in mouth and nose, then the penicillin crystals dissolved in water. As a little more than a layman, I was asked to give opinions in the matter and, as an entirely off-the-record report, found the crystals easier to take since the oil solutions seemed to carry a slightly objectionable oily flavor and aftermath at that time. "Good thing it was some time ago," said my doctor friend, "today I'd hardly know what to give you!"

I questioned him on this, of course, and since then, have asked other doctor acquaintances about the same thing. Penicillin as such seems to have gone. By any other fancy name you can get it. You can get 30-hour, 60-hour, 90-hour penicillin in oil and wax, this strength, that strength and this mixture under different trade names and marks, but just ordinary penicillin is practically gone by the boards.

Now these doctors are not specialists. They are on duty, as it were, twelve to fourteen hours a day what with clinics, hospital attendance, home attendance and evening hours. In their spare time they seem strangely human. A cocktail before dinner (highly recommended I am told, happily), a few hands of bridge, a highball now and then, a game of golf. And in that spare time what reading they do is usually constructive and in line with their practice and cases in hand. The beautiful literature extolling "Extenox, our new penicillin treatment," therefore, so earnestly explained by the detailer during his visits, is quite likely to be ignored. Mr. Jones is sent to the hospital with a respiratory disease and penicillin is indicated. Which form, which type, which brand? So of course our doctor cancels his golf game, so urgently needed for his own health, and spends two hours reading all about Extenox, Pertenox, Gogoplex and so on until he gets the one he thinks the best. Of course he doesn't do anything of the kind! He hopes to God he still can get some penicillin in the form he wants to use it made by a reputable firm and, regardless of the virtues of the others, he keeps to his standard.

That is the M.D.'s gripe. They say the U. S. Pharmacopoeia is of little use in most modern cases. Their time is at a premium and the products are confusing. Penicillin is only one example. Vitamins are worse. The doctor can spend hours finding out the particular brand name for the potencies of each ingredient needed for the specific case. If he gives up and "prescriptions" it to a druggist, it usually costs the patient more as a prescription and, unless the most ethical druggist is involved, inferior grades of merchandise (giving greater percentages to the druggist) may be substituted. So the doctor likes to state the brand name and trade-mark. Only he is rather busy. This is the doctor's side of the argument.

Now let's look at the producing end of the deal. There are a great number of fine ethical organizations formulating drugs. Some are large, powerful, well known. Others are smaller but just as good. And the large corporation of today was the small struggling firm of yesteryear. Each strives in competition.

Penicillin came along as the wonder drug. I call it that with reason. Five years ago it saved my life when appendicitis-peritonitis caught up with me. I forgot to ask the brand name but it was good.

Everyone piled in and started making it. Then came the selling and that is where trade-marks reared their ugly heads. How to distinguish one brand from another. You have a reputation, a following, a clientele who expect the greatest advances in technique from you. Penicillin in oil, crystalline, in oil plus wax for as much as 90-hour absorption all came along. Logically, trade-marks for each followed. A trade-mark is an indication of origin. That is its purpose. Thereby it gives indication of quality, dependability, uniformity based on past performances and none of these are so important as in the drug fields.

So there you have the quandary. You, the manufacturers, have a right to your identification by t r a d e - m a r k s and names. They, the doctors and users, have a right to know the score without researching through pages of literature, however well put out (and some of the brochures put out by ethical houses can be classed as *really* beautiful). There is a solution but one I do not want to advance yet until hearing the "case for the drug people," as I will explain later.

A few years ago I attended a very

BENJ. FRENCH, INC.

ESSENTIAL OILS -- AROMATIC CHEMICALS

DESCOLLONGES
PRODUCTS

JASMAROME

A new synthetic Jasmin which reproduces to a remarkable degree the true odor of Natural Jasmin Oils extracted from pomade washings. This new product gives splendid results, used with the natural or to replace it entirely. Write for sample or trial quantity.

160 Fifth Avenue *New York 10, New York*

KOSTER KEUNEN

★

BEESWAX

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vital and interesting meeting as representative of the firm I was then working with at which there were gathered chemists, doctors, lawyers and advertising men of one of the bigger and better drug manufacturing houses. The question debated for two days was similar to those above. It was "should an ethical house patent their new developments and trade-mark the products." The decision was a draw. They went on patenting and trade-marking their products as previously as a path of least resistance. I heard plenty *then*. What I would like to know *now* is what you drug men think about it. There is no prize in this competition but I would like to get the usual answer in less than fifty words to "why I think (do not think) trade-marks should be applied to ethical drugs such as penicillin, vitamin concentrates, etc."

The humidity has gotten us all but if you could spare a few seconds to give this magazine your views we would all appreciate it. I repeat, there is one solution, which as I see it means more or less registering or publishing your trade-mark and its formula plus pertinent data. Before that can be done we should have a cross-section of your views. Dr. Fleming did not decide to trade-mark "Penicillin" as I believe he could have done. He may have been right or wrong in not doing so. What do you think? I may have stirred up a hornet's nest on this problem since I know it has been batted forwards, backwards and sidewards. But with your help we may help the men in white who are your basic customers in the ethical drug field.

It's worth trying, anyway, so let's go.

Act of 1946

The following Trade-Marks have been re-published under the terms of the above (Lanham Act). No opposition can be filed against them but they are all subject to cancellation proceedings.

Hess—VI—H—188,445
Reg. Aug. 26, 1924 to Frank Hess., St., Paul, Minn.
Republished by registrant

Jane Wandl—VI—CD—211,379
Reg. Apr. 13, 1926 to Woodward & Lothrop, Wash., D. C.
Republished by registrant

Laungerol—IV—A—226,800
Reg. Apr. 19, 1927 to Perkins Soap Co., Springfield, Mass.
Republished by registrant

Loxol—VI—H—219,622
Reg. Oct. 19, 1926 to Inecto, Inc.
Republished by Sales Affiliates, Inc., N. Y., N. Y.

Marinello—VI—BCDH—210,174
Reg. Mar. 9, 1926 to Marinello Co.
Republished by Sales Affiliates, Inc., N. Y., N. Y.

Mme C. J. Walker (and des.)—VI—H—120,759
Reg. Mar. 5, 1918 to Mme. C. J. Walker Mfg. Co., Inc., Indianap., Indiana.
Republished by registrant

Nix—VI—D—158,497
Reg. Sept. 5, 1922 to Kenneth Moore.
Republished by Nix Cosmetics Co., Memphis, Tenn.

Nyko (and des.)—IV—K—226,288
Reg. Apr. 5, 1927 to Nyko Labs.
Republished by Nyko, Inc., Chi., Ill.

Perzone—IV—A—318,957
Reg. Nov. 6, 1934 to Perkins Soap Co., Springfield, Mass.
Republished by registrant

Plastique—VI—H—396,946
Reg. Aug. 11, 1942 to Louis Napolitan N. Y., N. Y.
Republished by registrant

Plato—IV—K—426,357
Reg. Dec. 24, 1946 to Clark Cleveland, Inc., Binghamton, N. Y.
Republished by registrant

Savex—IV—A—377,560
Reg. May 7, 1940 to Climalene Co., Canton, Ohio
Republished by registrant

Shelton Vinis' Kreem Wave—VI—G—397,163
Reg. Aug. 25, 1942 to W. G. Shelton Co., St. Louis
Republished by Gaylord-Shelton, Inc., Chi., Ill.

Softene—IV—M—98,324
Reg. July 7, 1914 to Softene Co.
Republished by Climalene Co., Canton, Ohio

Sportsman—IV—BDFHIST—418,223
Reg. Dec. 11, 1945 to John Huson Moore, Inc., N. Y., N. Y.
Republished by registrant

Suz—VI—H—355,076
Reg. Mar. 8, 1938 to Marinello Corp.
Republished by Sales Affiliates, Inc., N. Y., N. Y.

Teel—VI—K—385,915
Reg. Mar. 25, 1941 to Proctor & Gamble
Republished by registrant

Torben—VI—C—222,965
Reg. Jan. 11, 1927 to Marinello Co.
Republished by Sales Affiliates, Inc., N. Y., N. Y.

Triumph—IV—A—107,012
Reg. Nov. 9, 1915 to Theo. Robertson Soap Co., Chicago, Ill.
Republished by registrant

Tro Jan—IV—AM—430,719
Reg. June 24, 1947 to Trajan Prods. & Mfg. Co.
Republished by Diversey Corp., Chi., Ill.

Utility—IV—A—261,318
Reg. Sept. 17, 1929 to Theo. Robertson Prods. Co., Chi., Ill.
Republished by registrant

Vestal—IV—AM—191,634
Reg. Nov. 11, 1924 to Vestal Chem. Co.
Republished by Vestal Labs, Inc., St. Louis, Mo.

Vestal—VI—DT—190,608
Reg. Oct. 14, 1924 to Vestal Chem. Co.
Republished by Vestal Labs, Inc., St. Louis, Mo.

Wisk—VI—D—354,710
Reg. Feb. 22, 1938 to Marinello Corp.
Republished by Sales Alffiiates, Inc., N. Y., N. Y.

The following Trade-Marks were published in the official Gazette of the United States Patent Office in Volume 610 (number 4) dated May 25, 1948, and Volume 611 (numbers 1-3) dated June 1 to June 15, 1948, inclusive.

Ann Meredith's Hair Mist—VI—H—525,718
Vonett Sales Co., Los Angeles, Calif.
Ser. Oct. 10, 1947 D. U. June 2, 1942

Ardena—VI—CHS—532,988
Eliz. Arden Sales Corp., N. Y., N. Y.
Ser. Sept. 2, 1947 D. U. July 1920

B.V.D.—VI—I—531,093
The B.V.D. Corp., N. Y., N. Y.
Ser. Aug. 12, 1937 D. U. July 2, 1947

Bath Tunes (and des.)—IV—A—512,322
Illustrated Soap Co., N. Y., N. Y.
Ser. Nov. 9, 1946 D. U. Sept. 25, 1946

Biarritz—VI—G—438,978
Hope Beauty Supply Co., Prov., R. I.
Ser. No. 524,248—June 16, 1947
Reg. May 25, 1948

Biriatou—VI—B—503,872
Jean D'Hennery, Inc., (Nemours) N. Y., N. Y.
Ser. June 14, 1946 D. U. May 8, 1946

Blair's—VI—ST—506,188
Morton Mfg. Corp., Lynchburg, Va.
Ser. Aug. 19, 1947 D. U. July 1, 1936

Brief Encounter—VI—C—532,157
Park & Tilford, N. Y., N. Y.
Ser. Aug. 22, 1947 D. U. July 31, 1947

Caron (and des.)—VI—BC—501,371
Felicie Bergaud (Parfumerie Caron) Paris, Fr.
Ser. May 3, 1946 D. U. July 1945

Cheek to Cheek—VI—BC—528,870
Parfums Jerome, SARL, Paris, Fr.
Ser. July 18, 1947 D. U. Jan. 30, 1947

Chemiglov—VI—C—530,926
Eimer and Amend, N. Y., N. Y.
Filed Aug. 9, 1947 D. U. Sept. 10, 1945

Ciel de France—VI—B—503,874
Jean D'Hennery, Inc. (Nemours), N. Y., N. Y.
Ser. June 14, 1946 D. U. May 8, 1946

Cocoa Almond—IV—A—530,742
Los Angeles Soap Co., L.A., Calif.
Ser. Aug. 7, 1947 D. U. Feb. 23, 1915

Conti (and des.)—VI—CH—547,403
Conti Prods. Corp., Brooklyn, N. Y.
Ser. Oct. 2, 1947 D. U. Jan. 1937

DG—VI—ABCDEFH—543,613
Lehn & Fink Prods. Corp., Bloomfield, N. J.
Ser. Dec. 6, 1947 D. U. 1933

DG—IV—A—543,612
Lehn & Fink Prods. Corp., Bloomfield, N. J.
Ser. Dec. 6, 1947 D. U. 1933

De Miracle—VI—D—543,889
Consol. Royal Chem. Corp., Chi., Ill.
Ser. Dec. 10, 1947 D. U. Oct. 7, 1903

Dun-L—VI—T—530,726
Dun-L Prods., Inc., N. Y., N. Y.
Ser. Aug. 7, 1947 D. U. Apr. 15, 1947

Dunn's—VI—H—439,264
C. Dunn, Tuskegee Inst., Ala.
Ser. No. 506,623—July 17, 1946
Reg. June 8, 1948

Duvex—IV—A—536,955
Salomon Freres, SARL, Pantin, Fr.
Ser. Oct. 6, 1947 D. U. Aug. 26, 1937

Gingisol—VI—K—515,815
Gingisol Labs., Cleve., Ohio
Ser. Jan. 16, 1947 D. U. Aug. 7, 1946

Haviland—VI—ABC—534,437
Haviland Labs., Inc., N. Y., N. Y.
Ser. Sept. 13, 1947 D. U. 1925

(To be continued)

Patent Thoughts and Trends

By THOMAS CIFELLI, Jr., Patent Attorney

ALMOST two years have gone by since this department met its first deadline. During this time a number of patent topics—related and unrelated—have been discussed in these columns, no effort having been made to attain coherence among the various articles. It is supposed to be good for individuals and organizations to conduct self-audits from time to time. Maybe it would not be a bad idea to take some bearings and look over the entire U.S. patent panorama, once over lightly.

We have discussed a number of things about the U.S. patent system here but as yet very little has been said as to what it really is. A brief historical survey of the beginnings of our patent system and a discussion of a few of the chief provisions of the patent statutes concerning, for example, what is patentable, who may obtain a patent, how patents are obtained and some of the things which can be done with patents appears to be in order.

Origin of the U. S. Patent System:

Though the first real patents are said to have appeared in Italy during the middle ages, our patent system stems from that of England. Our own system will therefore be better understood if we turn our attention to a spot of English history at this point.

The reign of Queen Elizabeth, as we all know, saw English commerce and colonization flourish. Many people performed services for the nation in these fields. It was natural, therefore, that the good Queen desired to reward them. The available revenues were inadequate. Her ingenuity, however, was up to the task, for she simply granted her favorites what were called patents for monopolies. In time many of the commodities needed by the people were covered by these so-called patents. To name only a few: salt, iron, cards, steel, bottles, anise seeds and vinegar. In order to enforce their monopolies on these commodities the favorites were given and employed arbitrary powers. As a result, the people suffered and finally, in 1623, the situation had grown so intolerable that the famous Statute of Monopolies was adopted. It did away with practically all existing monopolies and forbade any new ones of the kind referred to.

If the Statute of Monopolies had stopped right there, one might well ask if a patent system could be justified, for a patent is a monopoly of a sort. The answer may be found right in the Statute itself. It expressly permitted patents, or monopolies if you will, to the *first inventor of new manufactures*. In other words, the Statute classified monopolies into two groups: the odious and the beneficial monopolies. The basis of the distinction is that the holder of an odious monopoly takes something from the people that they enjoyed before; for example, the right to buy common table salt without the imposition of a private tax. On the other hand, the holder of a beneficial monopoly takes nothing from the people that they had before. He first has to contribute something not known before and for his contribution he obtains an exclusive right, for a limited period only, to enjoy only what he contributed.

Fundamental Basis of the U. S. Patent System:

The idea that there are two kinds of monopolies, one good and the other bad, naturally found its way into our thinking and was embodied in the laws of our colonies. Even today, the distinction between the two kinds of monopolies is part of our law. Our dislike for the odious kind of monopolies may be seen in our anti-trust acts; while our recognition of the beneficial monopoly, or patents, may be seen in our patent laws. Indeed, in order that we might not lose sight of the advantage of beneficial monopolies, our founders saw fit to provide for such monopolies in our federal Constitution, which gives Congress the power:

> "To promote the Progress of Science and useful Arts by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." (Art. 1, Sec. 8.)

To carry out this constitutional provision, Congress lost little time in passing the first Patent Act, in 1790. No less a monopoly-hater than Thomas Jefferson, as Secretary of State, was on the board which granted the first U.S. patents. Since 1790, the patent laws have of course been amended from time to time. Under the protection of the patent laws, well over two million patents have been granted.

A patent can be said to be merely a contract between the United States government and an inventor. The inventor discloses his invention, and the government, in exchange for that disclosure, gives him for a period of seventeen years the exclusive right to make, use and sell that particular invention. After this period the patent right expires and the public is free to use the invention.

Not every creation of man's mind can be patented. The patent statutes prescribe what can be patented, and unless the invention falls into the specified classes, the inventor cannot obtain a U.S. patent. The classes are as follows: arts (which include chemical processes), machines, articles of manufacture, and compositions of matter. Certain plants and ornamental designs may also be patented.

Matters which are not subject to the protection of the patent laws include laws of nature or scientific principles, the function of a machine, an abstract idea, mental theories, plans of action and systems of doing business.

Who May Obtain a U. S. Patent:

Only the real inventor may apply for a United States patent. This provision highlights one democratic aspect of our system as compared with those of many other countries, including England. Such countries permit anyone, even if he contributed nothing to the invention, to apply for a patent and as a result the real inventor is often denied due recognition.

What is Patentable:

Assuming that the subject matter relates to one of the classes of items which the patent laws protect, it is necessary to show three things in order to comply

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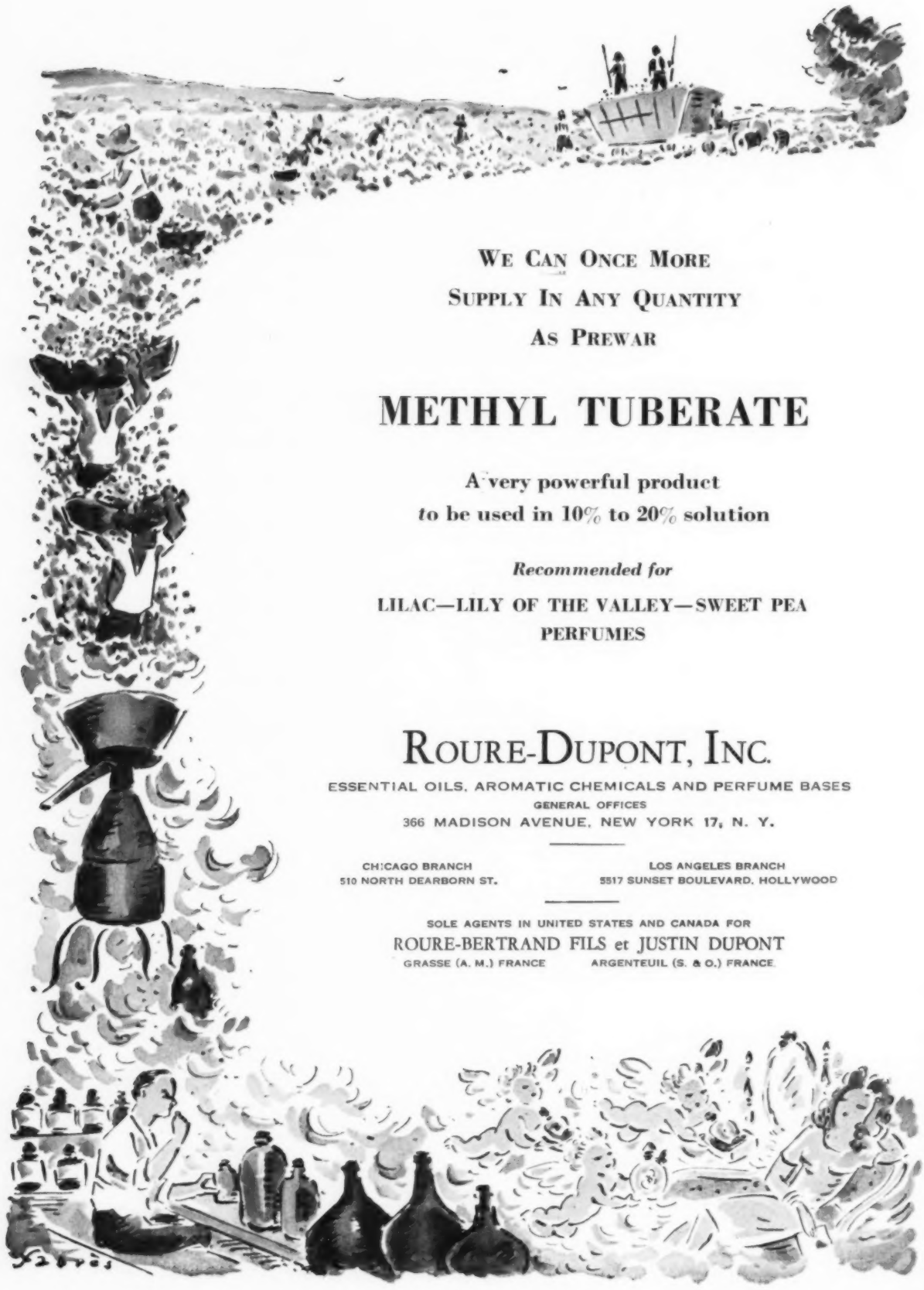

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with the requirement of patentable invention. In the first place, the matter must be new; secondly, it must be useful; finally, it has to involve "invention." So far, this latter word has defied definition. Even the United States Supreme Court has stated its inability to define it. A large number of rules telling what is not invention has been accumulated over the years, but even these are not very helpful because there are so many exceptions to them. In practice, however, this problem is not as hopeless as it may appear, for if the result is a practical advantage not before attained, then there is a chance that a patent may be obtained.

If a patent on an invention is desired it is necessary to prepare a patent application. For present purposes, the essential part of this document may be said to be the *specification*. This consists of two main parts, the disclosure and the claims. It is required that the disclosure be in such full terms that anyone skilled in the field to which the invention relates may practice the invention by following the disclosure. The claims measure the amount of protection. It often happens that in reading a patent disclosure one gets the distinct impression that a very broad advance has been made, only to find in reading the claims that the protection is rather limited.

Prosecution of Patent Applications:

The patent application is mailed to the United States Patent Office, where it is assigned to a Patent Office Examiner in one of the sixty-odd divisions of the Patent Office. Each division has a field of science and applied arts allotted to it so that the examiner to whom the case is assigned is well versed in finding what is already known in the field covered by the invention.

All applications are taken up in regular order and in due time, now approximately six or seven months, the examiner reaches the case and studies it. The results of his study are embodied in a letter to the inventor, or his attorney, if he has one. This letter, called an *office action*, contains a list of references believed by the examiner to be pertinent to the claimed invention and also almost invariably states that none of the claims are patentable, giving from one to a dozen or more different reasons.

Six months are usually allowed within which to respond to the examiner's letter. A choice of several steps is open. For example, the case may be dropped if it is believed that the examiner is correct; or, one may point out the distinctions between the cited references and the claimed invention; or the old claims may be cancelled and new ones added. This writing back and forth goes on, usually for about two to three years, until the examiner either allows the case and a patent is issued, or the application is finally disallowed, in which case there is provision for an appeal to the Patent Office Board of Appeals and, later, to certain courts.

Nature of Patent Rights:

Fundamentally, a patent gives an inventor just one right and that is a negative one, namely the right to exclude others for seventeen years from practicing the invention covered by his claims. *He may not himself have the right to practice his own invention!* This point was discussed in detail in last month's article.

We now arrive logically at the matter of patent licenses. By this device the apparent impasse in which an inventor who holds a dominated patent is often solved. The holder of the dominating patent may license the holder of the improvement patent, and vice-versa. In this way the people benefit directly because they are enabled to enjoy the fruits of the work of both inventors. The inventors also benefit because they are enabled to earn rewards on their contributions. Since such rewards stimulate others to invent, the benefits to the people are multiplied.

At the present time the principle of compulsory licensing does not apply to United States patents. The owner of a patent has the right to refuse to grant licenses. Much debate has centered on this point as there are some who would require compulsory licensing. The National Patent Planning Commission, appointed by the late President Roosevelt, rejected this principle.

As anyone who has had anything to do with the United States patent system knows, it is far from perfect. However, it has admittedly been a potent force in helping this country to the forefront of technology. It has done this by providing an economic climate that, as can be seen from the foregoing, has acted as a stimulus to industrial and scientific progress by providing the twin incentives: the incentive to invent and the incentive to invest.

X-Ray Contrast Media

About two years ago Schering Corporation succeeded in having the courts uphold the validity of its Dohrn and Diedrich patent, U. S. 2,345,384, insofar as it related specifically to Priodax (beta- (4-hydroxy-3, 5-diodophenyl) -alpha-phenyl propionic acid).

The court in that case said, with regard to Priodax, that it combined all three of the characteristics desired in a contrast agent, obtaining the required solubility from the carboxyl component, affinity for the bile from the phenyl component and opacity from the iodine component.

Now comes Schering with just-won U. S. 2,436,270 and obtains protection on polyiodo diaryl aliphatic acids, specifically, alpha-(p-iodophenyl) - p - iodo cinnamic acid, and the corresponding benzyl derivative.

It will be noted that these compounds do not contain a phenyl component. Yet they are said to be x-ray contrast media, as well as possessing chemotherapeutic and germicidal properties.

Apparently, the material sold as Priodax isn't the only one which possesses the desired properties for x-ray contrast use. If Schering can help it, any patents covering alternative materials are not going into adverse hands.

Other Patents

U. S. 2,440,229—**Hoffmann-La Roche — Alpha - Aceto, Alpha - Chloro, Gamma-Butyrolactone Process.**

U. S. 2,440,355 to *2,440,361*—**Eli Lilly —Culture Media for Penicillin Process.**

U. S. 2,440,545 and 2,440,546—**G. A. Jeffreys—Preparation of Vitamin-rich Products. Coating of active yeast wort is formed on vegetable granules so as to give an air-pervious mass.**

U. S. 2,440,606—**Distillation Products—Scum, obtained from steam after it has been passed through a fat which contains tocopherol, is hydrogenated to give an anti-oxidant.**

U. S. 2,440,649—**National Drug—N-4-(Quinazoline) Amino Benzoyl Glutamic acid.**

U. S. 2,440,703—**White Labs.—N,N-Dimethyl - N' - Benzyl - N'-2- Thiazolyl)-Ethylene Diamines.**

U. S. 2,440,874—**T. Reichstein—Compounds of the Adrenal Cortical Hormone Series.**

U. S. 2,441,063—**Quaker Chemical—Salts of Alkylolamine Boric Esters. Wetting and detergent agents.**

U. S. 2,441,069 — **Ciba — 2-Amino-Methyl Indenes Uterotonic Activity.**

(To be continued)

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Theatrical Make-Up

F. Winter (*Soap, Perf. & Cosmetics* 21:360 & 477, 1948) has prepared a very comprehensive report on the formulation and production of theatrical make-up. This European authority points out that the professional make-up of actors and actresses calls for special cosmetics, with very bright colors, to restore to the face the appearance of vitality of which it is robbed by the stage lights, especially the footlights. In most cases, stage make-up is used in the form of sticks, of suitable thickness and length. A number of formulas are given to illustrate this kind of make-up.

Broadly speaking, the manufacturing procedure is as follows: Sift well all the powdery materials (whites and coloring matter proper), then grind these powders with the fatty base, which has previously been melted. Heat the mass on a water-bath, mill carefully, and pass through a sieve with close meshes. See that the substance is absolutely homogeneous, without clots, and uniform in color; re-heat the mass. When the hot cosmetic paste is sufficiently fluid, it is ready for molding (bright copper molds).

Formulas for Fundamental Bases are given as follows:

Greasy Base

Mineral oil, medium viscosity	110
White ceresin	60
White wax	15
Benzoinated tallow	235

Dry White

Zinc oxide	700
Titanium dioxide	200
Talc	100

Greasy White, 1

Greasy base	420
Zinc oxide	406
Titanium dioxide	116
Talc	58

Greasy White, 2

Greasy base	420
Zinc oxide	580

Fundamental shades for different types of complexions are provided in the form of large sticks; formulas for making such make-up being as follows:

Complexion No. 1
(Woman's coloring)

Greasy white	1,000
Burnt sienna	14.
Orange lake	0.2

Complexion No. 1½
(Brunette woman)

Greasy white	1,000
Burnt sienna	28
Orange lake	0.35

Complexion No. 2
(Young man, 18 to 24 years)

Greasy white	1,000
Burnt sienna	56
Orange lake	0.6

Complexion No. 2½
(Young man, 24 to 30)

Greasy white	1,000
Cadmium yellow	17
Dark ochre	20
Red geranium lake	20
Burnt sienna	9

Complexion No. 3
(Man, 30 to 40)

Greasy white	1,000
Red geranium lake	24
Dark ochre	24
Cadmium yellow	24
Burnt sienna	16

Complexion No. 3½
(Dark man)

Greasy white	1,000
Red geranium lake	60
Dark ochre	70
Cadmium yellow	63
Burnt sienna	27
Mineral oil	40

Complexion No. 4
(Bronzed complexion, sailor, soldier)

Greasy white	500
Zinc oxide	300
Burnt sienna	200
Cadmium yellow	14

Complexion No. 4½
(Brick-red complexion, old soldier, veteran, etc.)

Greasy base	500
Zinc oxide	500
Burnt sienna	100
Mahogany brown (Cassel)	75
Cadmium yellow	16

Complexion No. 5
(Bilious, yellowish complexion)

Greasy white	1,000
Dark ochre	40
Cadmium yellow	25
Red geranium lake	7

Complexion No. 5½
(More accentuated bilious complexion)

Greasy white	1,000
Dark ochre	30
Cadmium yellow	30
Red geranium lake	11

A number of special complexion sticks for simulating colored rolls are described by Winter; these being illustrated in the following typical formulas:

Aida

Greasy base	600
White ceresin	150
Light umber	112
Mahogany brown	75
Medium umber	125

Negro

Greasy base	400
White ceresin	100
Dark umber	300
Greasy black	400

Mongol
(Chinese, Japanese, etc.)

Greasy base	1,000
Zinc oxide	350
Yellow ochre	350
Cadmium yellow	150

Redskin

Greasy base	600
White ceresin	150
Mahogany brown	100
Burnt sienna	100
Medium umber	75

Retouching cosmetics, made as thinner, medium sticks, are used for various retouching purposes as, for example, drawing in wrinkles or bags under the eyes, shading the temples and for other diversified services. A number of suitable formulas are given:

Greasy Black

Greasy base	800
White ceresin	200
Lampblack	60

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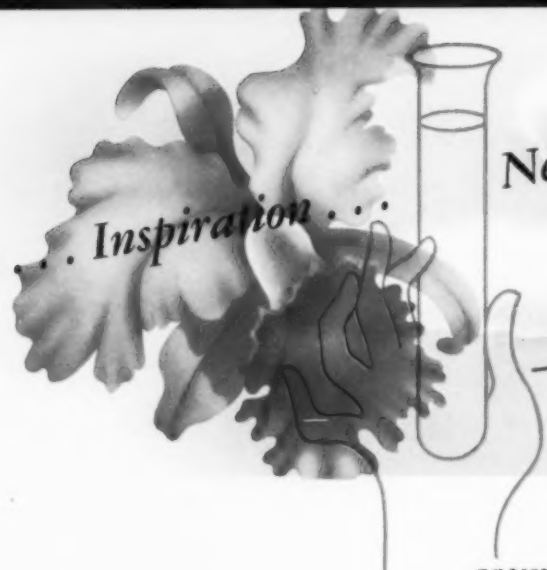

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Greasy Yellow

Greasy base	500
Dark ochre	75
Yellow ochre	150
Cadmium yellow	10

Greasy Brown

Greasy base	400
White ceresin	100
Medium umber	250

Greasy Dark Brown

Greasy base	400
White ceresin	100
Dark umber	300

Greasy Swarthy

Greasy base	400
White ceresin	100
Burnt sienna	200
Mahogany brown	50

Greasy Grey

Greasy white	1,250
Lampblack	1.5
Greasy black	10
Orange lake	1
Cadmium yellow	7

Greasy Dark Grey

Greasy base	100
White ceresin	25
Zinc oxide	70
Greasy black	35
Greasy white	100
Ultramarine blue	3

Greasy Dark Blue

Greasy base	400
White ceresin	100
Zinc oxide	150
Ultramarine blue	125
Lampblack	4

Youthful Rouge

Greasy base	400
White ceresin	100
Geranium red	150
Zinc oxide	150
Cadmium yellow	35

Old Age Rouge

Greasy base	400
White ceresin	100
Alizarine lake	125
Ultramarine blue	75

Preparations for shading the eyelids are given by Winter. By combining coloring powders with a greasy base, greasy eyelid cosmetics are obtained:

Swarthy

Greasy base	40
Talc	30
Burnt sienna	40
Yellow ochre	20

Violet

Greasy base	250
Ultramarine blue	4
Alizarine lake	2
Zinc oxide	50

Pale Green

Greasy base	30
Titanium dioxide	30
Ultramarine blue	6
Cadmium yellow	4

Pale Blue

Greasy base	50
Ultramarine blue	25
Titanium dioxide	40
Talc	70

Thin pointed pencils for eyebrows are also given, as follows:

Black Eyebrows

Greasy base	800
White ceresin	200
Lampblack	50
Ultramarine blue	30

Chestnut

Greasy base	400
White ceresin	100
Light umber	225
Mahogany brown	125

Middle Brown

Greasy base	400
White ceresin	100
Dark umber	300
Lampblack	0.5

Various make-up accessories are described by Winter. Prominent among them are cosmetic removers. These can be made as creams or as sticks. A typical cream type remover consists of:

Ropy petroleum jelly	400
Cocoa butter	400
White ceresin	200

For a stick-type make-up remover, the following may be used:

Mineral oil	700
Yellow beeswax	350
Paraffin wax	200

Formulas for making theatrical cold cream are also given. Winter points out that the composition of this accessory for stage make-ups differs considerably from that of the classic cold cream, which is intended for routine skin care. Theatrical cold cream has to some extent the properties of a cosmetic remover and is often used as such. A typical product of this type is as follows:

Mineral oil, viscous	450
Paraffin wax	200
Anhydrous lanolin	50
Cocoa butter	200
Cetyl alcohol	50
Water	75

Additional Revised T.G.A. Specifications

The Board of Standards of the Toilet Goods Association has issued additional revisions of certain of its specifications. These include specifications number 7, 8, 11, 13 and 16, covering, respectively, the raw materials: crystalline petroleum wax, micro-crystalline petroleum wax, precipitated chalk, propylene glycol and magnesium carbonate.

British Anti-Sunburn Cream

To meet the demand for anti-sunburn creams, it is suggested in the *Perfumery and Essential Oil Record* (39:152, 1948) that products such as the following will serve. Thus, a formula for a "soapless" anti-sunburn cream which will be found effective consists of:

Menthyl salicylate	4
Phenyl salicylate	6
Sweet almond oil	20
Mineral oil	10
Anhydrous lanolin	1
Cetyl alcohol	2
Glyceryl monostearate	2
Water, to make	100

The fats and oils are heated and melted together, and warm water is added containing the water-soluble ingredients plus preservative. Stirring and homogenizing gives a good cream, which can be colored and perfumed. A similar preparation containing soap consists of:

Stearic acid	12
Anhydrous lanolin	2
Propylene glycol monostearate	3
Mineral oil	4
Sweet almond oil	4
Cetyl alcohol	3
Glycerin	2
Triethanolamine	1
Water, to make	100

The fats, oils and water are added and a cream formed as before, and then a mixture of

Menthyl salicylate	6
Phenyl salicylate	6

is added and the whole well mixed.

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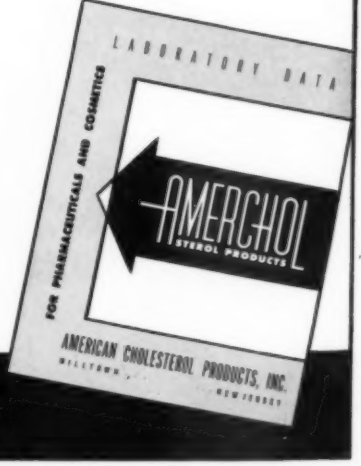

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Alcohol In Medicine

(Continued from page 174)

a definite retarding effect on the development of arteriosclerosis and atherosclerosis.

The vasodilatation produced by alcohol is also utilized in the treatment of certain peripheral vascular diseases.[8] As remarked by Jones,[23] "The fact that it is the most effective vasodilator and, in moderate doses, is mildly analgesic, makes it probably the most valuable single drug in the treatment of peripheral vascular disease." In commenting on the use of vasodilator drugs in the treatment of these conditions, Landis[24] observes that alcohol, given in the form of an acceptable beverage to provide 0.5 cc of alcohol per kilo of body weight, induces peripheral vasodilatation which lasts, on the average, for four hours. It is this effect that makes alcohol an important aid in the treatment of Buergers disease, marked by impaired circulation in the extremities.[1,25]

For many generations, people have used alcohol to combat colds, especially "head colds." Pharmacologists[8,9] concede that alcohol may be of benefit for such purposes. Especially noteworthy and Fabricant's[26] remarks with respect to its value and limitations. "Use of alcohol to check a cold," says he, "deserves special mention. Fear of increasing its popularity has prevented many doctors from using it. But alcoholic beverages have been used for generations to avert the development of impending head colds, especially after chilling by exposure to inclement weather. Alcohol aids in re-establishing the circulation to the skin and nasal passages, features that are scientifically valid. On the other hand, alcohol sometimes causes nasal congestion in some people. Before making too many raids on the whiskey cabinet, it is wise to remember that its continuous and excessive use may lower resistance of the body to pneumonia."

It has long been known that alcoholic beverages are excellent stimulants to the appetite, particularly in cases of anorexia. Alcohol is especially useful during convalescence and for debilitated and elderly people. It acts as a carminative to improve appetite, stimulate the flow of gastric juice, improve digestion and hasten the absorption of foods.[8,27] In addition to its other beneficial effects, Yates[28] points out that a mild alcoholic beverage provides a relaxing effect that is especially valuable in exhaustion and anxiety states. He notes that the usual method is to instruct the patient to drink a cocktail, a glass of dry wine, or a mild highball before lunch or dinner.

There is considerable difference of opinion as to whether alcohol ought to be classified as a food. In several respects it does differ markedly from other foods. Nonetheless, alcohol supplies energy to the body and this energy is available for body work. Approximately seven calories of energy are released by each gram of alcohol. It is used more rapidly than most foods; the combustion of alcohol beginning five to ten

(Continued on page 246)

Advancing Therapy

Comparative Studies with Methadon

Certain disadvantages of previously known potent analgesics have led investigators to search for new drugs which possess good analgesic properties but lack undesirable side effects. Following World War II knowledge of a new group of compounds prepared by German chemists was disclosed in a report by the United States Department of Commerce. Pharmacologists found one of these compounds, methadon (6-dimethylamino-4, 4-diphenyl-3-heptanone), to be outstanding. In investigations made by E. M. Christensen and E. G. Gross (J.A.M.A. 137:594, 1948) the analgesic effects in human subjects of methadon have been compared with those of morphine and meperidine hydrochloride ("demorol hydrochloride"). It was observed that methadon is an analgesic agent three times as potent as morphine and many times more potent than meperidine. It lacks sedative properties. Undesirable side effects are minimal. It may be administered intravenously for analgesia of rapid onset and short duration or subcutaneously for slower onset and longer analgesic action. The studies also showed that small doses of methadon afforded good analgesia clinically. Methadon seemed most useful for postoperative pain and for relief of pain from many other causes. Combined with neostigmine it should afford even greater relief for patients who have severe pain.

Streptomycin in Genitourinary Infections

In the *Journal of Urology* (59:96, 1948) C. G. Bandler, P. R. Roen and V. J. Mulaire presented an analysis of the results obtained in 15 patients with urologic infections in whom streptomycin was used. There have been cases in which streptomycin proved lifesaving after other measures failed. The urine may become sterilized, provided the offending organisms are susceptible to streptomycin. Failure to correct obstructive factors is responsible for the recurrence of infection and may be a factor in the development of bacterial resistance to streptomycin. In the presence of a calculus or of a nephrostomy tube, renal infection may be eliminated temporarily by streptomycin, but unless the obstruction is removed there will soon be a recurrence of the same organisms. There has been clinical improvement despite the fact that bacteria were still present in urine cultures, indicating that streptomycin may have been effective in altering the pathogenicity of the organisms. In nonspecific prostatitis it is possible to free the prostatic secretions of pathogenic bacteria for brief periods; however, streptomycin does not change the course of this disease entity. The streptomycin presently available has neurotoxic properties. In this series of 15 cases there were 2 cases of toxic labyrinthitis and 1 case of involvement of the left recurrent laryngeal nerve. In a fourth case there was mild and transitory involvement of the facial nerve. In view of the potential toxicity of streptomycin, its prophylactic use in urologic surgery should not be indiscriminate.

New Combination for Headache Therapy

B. T. Horton and his associates (Proc. Staff Meet., Mayo Clin. 5:105, 1948) have found that a caffeine-ergotamine tartratec ombination relieves headache more effectively than ergotamine tartrate alone. Of 55 patients treated with E. C. 110, a preparation of 1 part ergotamine tartrate and 100 parts caffeine, 31 were relieved of pain, 13 obtained some relief, and 11 were not helped. In 1 case serious toxic symptoms developed after the prolonged use of large doses. The usual dose was 2 tablets at onset of headache. Each E. C. 110 tablet contains 1 mg. of ergotamine and 100 mg. of caffeine.

Antihistamine Adjuvant

Lassitude and drowsiness induced by antihistaminic agents may be relieved by ferrous sulfate. According to a note in *Modern Medicine* (16:80, June 15, 1948) G. W. Stavraky was able to double tolerated doses of pyribenzamine without untoward effects when 0.5 to 0.6 gm. of the iron compound was given four or five times daily.

Benadryl in Parkinson's Disease

To the growing number of uses for the antihistaminic agents may be added the possible employment of benadryl in the treatment of Parkinson's disease or paralysis agitans. As pointed out by J. Budnitz in his preliminary report in the New England Journal of Medicine (238:874, 1948) treatment has always been symptomatic, and useful drugs have been limited almost entirely to those in the atropine series. These have consisted of hyoscine, hyoscyamine, belladonna and stramonium, either individually or in various combinations.

The use of benadryl in paralysis agitans was first tried on a patient in September, 1946, on a purely empirical basis. The result was so gratifying that other subjects with paralysis agitans were also given the drug to determine whether the improvement noted in the first patient was simply an unusual response in

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a suggestive person or whether the reaction could be consistently reproduced in others. Therefore eight patients suffering from paralysis agitans, all of them in the arteriosclerotic group, were treated with benadryl over a period varying from three to fourteen months. All patients noted considerable improvement in the symptoms so long as the drug was administered. Four of the treated patients continued to use parasympathetic-inhibitory drugs of the atropine series, and there seemed to be a synergistic action between these drugs and benadryl. A closely related antihistamine drug, pyribenzamine, apparently was ineffective in the treatment of Parkinson's disease.

Prevention of Dry Socket

"Dry socket" is an unpleasant complication of tooth extractions. Hence the significance of the report by H. W. Krogh (*J. Dental Research*, Feb. 1948) on the value of the sulfa drugs for preventing this condition. In his study the incidence of dry socket after consecutive extractions of 773 lower molars and bicuspids, in which tablets containing ½ grain sulfanilamide and ½ grain sulfathiazole were inserted into the sockets, was compared with the incidence of dry socket after extractions of 2,126 similar teeth used as controls. In the control series the incidence of dry socket was 3.1 per cent for erupted teeth and 27.6 per cent for impactions. No dry sockets occurred when sulfonamide tablets were used. Six impactions needed postoperative treatment. One patient developed a mild skin reaction.

Penicillin Prophylaxis of Respiratory Infections

The possibility that oral penicillin may be of value in the prophylaxis of upper respiratory infections is indicated in the study reported by J. H. Lapin (J. Pediatrics 32:119, 1948). In summarizing his observations Lapin states that 148 children from 8 months to 10 years of age have been given 50,000 units of oral penicillin as buffered tablets one-half to one hour before breakfast and supper for twelve months, with a control group of 110 children receiving no medication. The control group experienced no reduction in the average number of upper respiratory infections or the average number of febrile days in the twelve months of observation, as compared with the previous twelve months. The group given penicillin prophylaxis experienced a reduction in the average number of upper respiratory infections from 5.05 in the previous year of no penicillin prophylaxis to 2.3 in the year of penicillin prophylaxis (45.5 per cent) and the group experienced a reduction in the number of febrile days from 16.76 days in the previous year to 4.24 days in the year of penicillin prophylaxis (25.3 per cent).

Very noteworthy is the statement regarding a review of the literature to show the very controversial nature of the widely held belief that this prophylactic procedure would do harm by the production in vivo of penicillin-insensitive organisms; no such cases occurred in the 148 now reported and the 100 previously reported. Therefore, the suggestion is made that if these results can be corroborated in larger series over a longer period of time, a relatively inexpensive and harmless prophylaxis of upper respiratory infections in young infants and children will be possible.

Thiouracil and Propylthiouracil

In the American Journal of Medical Science (215:63, 1948), R. C. Grauer, H. DeWalt and C. W. W. Elkin report the clinical effects and the laboratory response to thiouracil and propylthiouracil observed in 100 thyrotoxic patients treated over a period of almost three years. The galactose thyroid function test was helpful as a therapeutic guide and as a diagnostic supplement to the basal metabolic rate in 70 per cent of the patients. The prophylactic use of "solubilized" liver as a source of folic acid failed to prevent the occurrence of 1 case of agranulocytosis, 1 case of granulocytopenia and 2 cases of leukopenia in thiouracil-treated patients. Neither the use of pyridoxine intravenously nor large doses of folic acid stimulated granulocytosis. Propylthiouracil is less toxic and more potent than thiouracil and apparently can be used with relative impunity in thiouracil-treated patients. Ten of the 15 thyrotoxic patients treated medically with thiouracil showed a remission of from seven to twenty-three months. The presurgical preparation of thyrotoxic patients with the antithyroid drugs lessens the mortality rate and decreases the period of hospitalization.

Treatment of Asthma

In a panel discussion on the treatment of asthma published in the *Journal of The American Medical Association* (137:453, 1948), R. A. Cooke summarized the major aspects of therapy of this condition. He pointed out that there are two phases to the treatment. One is symptomatic, the other is etiologic or against the cause itself. Symptomatic therapy is based on the physiologic procedures of getting air into the lungs and clearing the bronchi. One method is to loosen the tenacious secretions in the bronchi. The drug par excellence for that is iodide. When a rapid effect is needed the sodium salt may be given intravenously. Aminophylline gives relief to many patients with severe asthma. The rectal administration of 8 to 10 grains (0.5 to 0.6 Gm.) either in solution or as a suppository often assures a night's rest. Given intravenously, it is more promptly effective. Ephedrine (orally) and epinephrine are the drugs of choice. Epinephrine (aqueous) may be used in a spray or for injection. For prolonged effect injections of epinephrine in oil or gelatine are recommended. The old fashioned use of ipecac syrup should not be overlooked. The bronchi are better emptied by the act of vomiting, which tends to express the mucous plugs from the bronchi more effectively than does the act of coughing. Rest is essential. Chioral hydrate, paraldehyde or codeine for the cough are helpful drugs but should not be used to the point of decreasing respiration or depressing the center. Nutrition is another important factor. Attention should be paid to fluid intake, minerals and other essential foods. Severely asthmatic patients may do well on intravenous injections of amino acid products and dextrose (2 liters in twenty-four hours) only for one to two days. The diet is then increased to the point of caloric adequacy. Aside from symptomatic measures, treatment should be directed against the cause or against the allergic factor. This means above all a correct diagnosis. Many factors may be responsible for the asthma. Inhalants, foods, drugs and infection may act alone or in combination. Cooke believes that emphasis should be placed on the fact that asthma is not outgrown but that the earlier the patient is seen, given a correct diagnosis and treated, the better the results will be.

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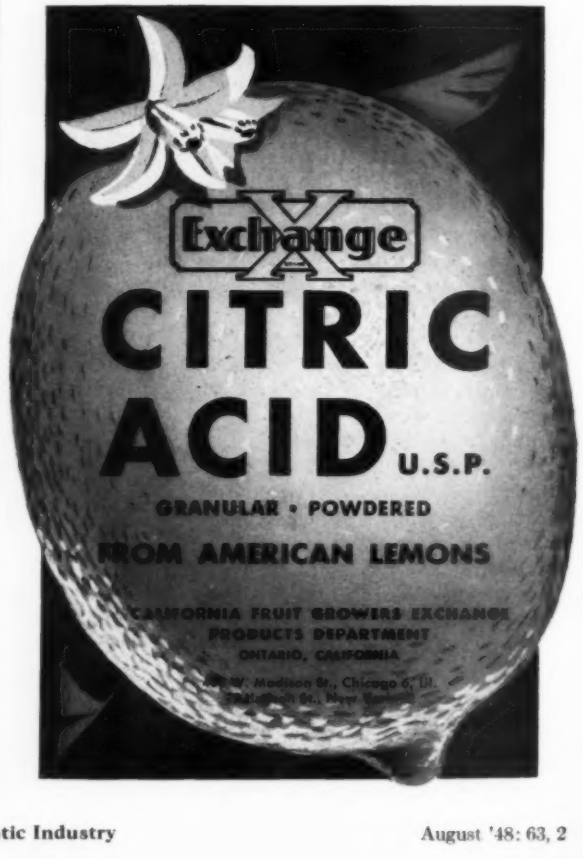


Industry's Books

Synopsis of Neuropsychiatry, by Lowell S. Selling, M.D., Director, Division of Mental Health, Florida Department of Health, Second Ed., 561 pp., Illus., C. V. Mosby Co., $6.50.

The second edition of this work should continue to serve as a simplified systematic coverage of neuropsychiatry and should aid the student in organizing his thinking, even supplying his memory with certain basic facts. The termination of the war enabled the author to eliminate paragraphs on the military aspect of the subject, and thus to utilize the space for illustrations and diagrams. In the section on psychiatry, some chapters have been added; those on Psychosomatic Medicine and Psychiatric Therapy. Others have been rewritten, such as the one on Psychopathic Personality. In the section on Neurology, many of the recommendations as to medication are changed, particularly recommendations with regard to modern drugs, such as penicillin and the so-called sulfa group. A new chapter has been added on Disorders of Symbol Use. The present volume provides an easily accessible means of supplementing the neuropsychiatric knowledge of the general practitioner and contains reference value to aid him in gaining easy access to the facts which he must know in order to make decisions concerning specific cases.

Marketing Drug Products, by Paul C. Olsen, 330 pp., Rutgers University Press, New Brunswick, $4.

This book is intended to be a description and analysis of the marketing methods and principles which are of special interest and use in the drug trade. The drug trade supplies the materials and equipment employed in the practice of the profession of pharmacy. In the United States and Canada the practice of the profession of pharmacy is carried on mostly in drugstores. These retail establishments are therefore a meeting place for marketing problems of the drug trade and for professional problems of pharmacy. A knowledge of the marketing methods and principles of application to the drug trade is therefore of interest and value to pharmacists and to students who have taken up the study of pharmacy, to persons who are suppliers of the materials and equipment used in the practice of pharmacy, and to persons who are suppliers of other articles sold in drug stores.

Handbook of Treatment and Medical Formulary, by Charles M. Gruber, Ph.D., M.D. Professor of Pharmacology, Jefferson Medical College, 594 pp., F. A. Davis Co., Phila., $7.

The major portion of this new book is devoted to treatment combined with nearly 1500 selected prescriptions in both English and unabbreviated Latin, using the latest (13th) edition of the U. S. Pharmacopoeia, the 8th edition of the National Formulary, and the latest edition of New and Nonofficial Remedies. The standard works on treatment have been drawn upon fully, while the current literature has been culled for all that is of practical value. The constant aim has been to present only that which is practical in handy, compact form for use in the everyday practice of every physician. Turn to any disease (listed alphabetically) and there, stripped of non-essentials, are explicit directions on care and management, selected prescriptions, differential diagnosis where helpful, modern treatment in the practical language of what, when and how. Among the new drugs prescribed are—amino acids, antibiotics, antihistaminics, antimalarials, bacitracin, bal, benadryl, chloroquine, demerol, dicumarol, diodoquin, folic acid, heparin, intocostrin, pamaquine, penicillin, promin, propylthiouracil, pyribenzamine, quinacrine, streptomycin, sulfonamides, tyrothricin, thiouracil.

Profitable Permanent Waving, by Norman G. Hillier, 341 pp., Pub. Norman G. Hillier, Jackson Heights, N. Y., $7.50.

This book is written and intended for those members of the industry who desire to know more about the subject so they can practice better professional permanent waving. Any material that does not contribute toward the actual giving of a professional permanent wave has been purposely omitted. Reference to hair growth as well as those complex phases of permanent waving which can only be explained in highly technical language have also been eliminated. Instead, an attempt has been made to give as concise and complete a picture as science has yet revealed, clearly explained in ordinary layman's language. As permanent waving goes . . . so goes the beauty salon industry. This fact has been evident since permanent waving first became popular. It is increasingly true today when cut prices and "home permanent waves" are decreasing the income of practically every professional permanent waver. This work should, and will serve a useful purpose in that it contains within its covers the information to enable the industry to give good professional permanent waves.

Colloid Chemistry, by Robert J. Hartman, Director, Industrial Division, The Arco Co., 572 pp., Illus., Houghton Mifflin Co., Cambridge, $6.50.

The theoretical and practical advances in colloid science have achieved such momentum during the past decade that the problem of revising a text in this field requires difficult decisions concerning the proper selection of material from the wealth of publications dealing with the results of modern research. In this second edition, a serious effort has been made to preserve the scheme of presentation and organization of the first edition, which emphasized the principles upon which the more recent advances have been based. At the same time an attempt has been made to explain the more important new theoretical developments of these principles in colloid science and the other sciences which it serves. More than eighty references have been added and several sections have been either supplemented or re-written to include some of the more recent advances. Much interesting new material has been omitted, not because it lacked importance, but rather because its stage of development was yet insufficiently complete for effective textural treatment, or because the addition of such new material would contribute little pedagogically to the exposition of the basic principles of colloid science. The selection of new material has been made with the view of expanding and extending the treatment of certain developments that are currently of greatest interest in fields of applied colloid science.

Perfumer's Shelf

Essential Oil from Citrus Decumana

The chemical examination of the essential oil derived from the leaves of *Citrus decumana* has been reported by S. S. Nigam and S. Dutt (*Indian Soap J.* through *Chem. Abstr.* 42:3534, 1948). Steam distillation of the leaves yields a fragrant yellow oil with the following constants:

Specific gravity	**0.8849**
Index of refraction	**1.4635**
Specific rotation (in methyl chloride)	**4.5**
Acid number	**10.6**
Saponification number	**126.4**
Saponification number, after acetylation	**264.5**

Fractionation of the oil indicates the following percentage composition: 2.6 *d-alpha*-pinene, 6.6 *l-beta*-pinene, 42.34 linalool, 44.18 linalyl acetate, and 4.28 unidentified residue.

Essential Oils of Portuguese Plants

In investigations on the aromatic plants of Portugal, A. F. Costa and J. C. do Vale (*Bol. escola farm. univ. Coimbra*, through *Chem. Abstr.* 42:3908, 1948) have studied the essential oil of *Lavendula viridis*. They found that the fresh flowering tops of the plants yield 0.5 to 0.8 percent of essential oil, with the following characteristics:

Specific gravity	**0.9239**
Specific rotation	**2° 50′**
Index of refraction	**1.4745**

The oil had the following approximate composition: terpene hydrocarbons (*alpha*-pinene, camphene, etc.) 20, cineole 30, alcohols (borneol, geraniol) 26, esters 5, aldehydes 0, ketones (camphor) 5, and undetermined 14 per cent.

These workers also investigated the essential oil of *Mentha rotundifolia*. The fresh tops yielded 0.05 to 0.097 percent of essential oil. This had the following properties:

Specific gravity	**0.960–0.975**
Specific rotation	**–24°**
Index of refraction	**1.475–1.484**
Ester number	**101–133**
Ketones, calculated as menthone	**1.84%**

The oil was found to consist largely of esters and free alcohols, with small amounts of pinene and limonene.

Isolation of Geraniol

A procedure for the isolation of geraniol is described by K. Narnia and P. N. Das Gupta (*Indian Soap J.* 12:186, 1947). The mixed varieties of palmarosa oil used as the source of geraniol in this work was of a pale yellow color and had the following characteristics:

Index of refraction	**1.4858**
Specific gravity	**0.8946**
Acid value	**3.41**
Saponification value	**76.3**
Saponification value after acetylation	**223.5**
Ester content (as geraniol ester)	**26.6%**
Total alcohol (as geriol)	**66.43%**
Free alcohol	**45.44%**
Solubility in 70% alcohol	**5 vols.**

One pound of oil, previously dried with sodium sulfate, was thoroughly mixed with one pound of finely powdered calcium chloride in a mortar. The heat of the reaction brought the temperature of the mixture to 30 to 40° C. The mixture was set aside in a desiccator in a cool place for several hours. The unreacted oil was decanted and the solid mass remaining in the mortar was pulverized, moistened with gasoline, and transferred to a Buchner funnel. The crude product was washed with gasoline by using suction and was then decomposed with water to liberate geraniol, which floated to the top. The separated product was repeatedly washed with warm water and finally steam distilled to get pure geraniol. The yield was 43.75 per cent. The poor yield is attributed to adulterations present in the oil.

Ketones from Oil of Lippia Asperifolia

As part of his studies of volatile plant substances, Y. R. Naves (*Helv. Chim. Acta* 31:29, 1948) found that the flowering tops of *Lippia asperifolia* (also known as *Verbena capensis, Zapania lantonoides,* and *Lantana larandulacea,* family Verbenaceae) from Tanganyika, East Africa, yielded 0.4 per cent of essential oil. The oil had the following properties:

Specific gravity	**0.9201–0.9236**
Index of refraction	**1.5073–1.5081**
Specific rotation	**–5.9–6.3°**
Acid number	**0.28–0.42**
Ester number	**5.2–5.6**
Carbonyl number	**287–295**

The oil contains about 80 per cent of ocimene, and a mixture of ketones, $C_{10}H_{14}O$, of the dehydrotagetone series (ocimenone, myrcenone and others) which Naves proposes collectively to call "tagetenones."

Solvent Extraction of Flavors

In *Food Processing Preview* for June, 1948, it is pointed out that modern processing of spices involves the extraction from a given spice of all the flavoring substances from the fruit, seed, bark, leaf or root. Such extraction aims at standardization of flavor-strength of spice ingredients and elimination of unavoidable impurities, bacterial contamination common in spices, and objectionable ground particles. Some spices like nutmeg, contain a high percentage of substances which may be recovered by applying heat, e.g. steam distillation. On the other hand, there are numerous spices in which the majority of the flavoring substances present are in the nature of heavy, dark colored, viscous materials totally unsuitable for removal by distillation. Examples of these oleoresinous spices are black pepper, red peppers of several species, ginger, tumeric, etc. There are

also numerous spices such as celery seed, cinnamon, cloves, sage, marjoram, etc., which contain both volatile and resinous flavoring substances; and the proportions of these substances to each other usually vary from lot to lot of the particular spice.

The solvent extraction method is the only known means by which both volatile and resinous flavoring substances may be simultaneously removed from spices. Different solvents are required for different spices in order to secure best results. Heat, either in the extraction cycle or in the solvent recovery cycle, may be very injurious to the quality of these delicate products. Therefore, it must be carefully applied and controlled. Briefly, the extraction process consists of loading spice, ground to the proper degree of fineness, into the percolators. Solvent is introduced and heated by steam jackets until the required temperature is reached. Solvent, or menstruum, is drawn off into a primary still. Within a few hours, varying according to the spice being treated, extraction is completed. The spent spice is dried in the percolator and discharged into a bin. Meanwhile, partially concentrated menstruum in the primary still has been transferred to a finishing still, where more accurate control of heat and vacuum is maintained during the finishing operation. Finished oleoresins, free of solvent and unaffected by processing, are discharged from the finishing still.

While the oleoresins, as such, are sold to many food processors, the spice oleoresins are also converted into dry, soluble seasonings which are free-flowing powders. These are packed in fiber drums for shipment. Carrier of the dry seasonings is either salt or dextrose. The oleoresins are absorbed by these soluble carriers and, when added to food products, the carrier dissolves, releasing its flavor for uniform and even distribution in the food.

Australian Oil as Source of Nerolidol and Linalool

The purpose of the report by A. R. Penfold, F. R. Morrison and H. H. G. McKern (*Perf. & Essent. Oil Rec.* 39:141, 1938) is to call attention to a potential source of perfume alcohols, nerolidol and linalool. This source is essential oil of the Australian trees *Melaleuca viridiflora*, Sol. Seeds of this tree, possessing foliage with a rose-like odor, were cultivated at an experimental plantation near Sydney. The results were most promising. The trees developed quickly and three years after planting were cut down, and the whole of the foliage from each tree distilled. The respective oils gave the following range of yields and characteristics:

Yield (calculated on freshly cut leaves and terminal branchlets)	**1.7 to 2.6%**
Specific gravity at 15°/15°	**1.4720 to 1.4763**
Refractive index at 20°	**0.8806 to 0.8857**
Optical rotation, 100 mm. tube	**+13.3° to +14.6°**
Ester No.	**2.8 to 4.8**
Ester No. after acetylation	**163 to 193**

When the above oils were combined and fractionally distilled, it was found that, apart from a little benzaldehyde in the first runnings, the oil was a simple binary mixture in proportions of about 30 per cent linalool and 70 per cent nerolidol. The alcohols had the following constants:

	Linalool	*Nerolidol*
Boiling range at 10 mm.	**80° to 81°**	**142° to 143°**
Specific gravity 15°/15°	**0.8690**	**0.8804**
Refractive index at 20°	**1.4627**	**1.4808**
Optical rotation, 100 mm. tube	**+17.7°**	**+13.1°**

German Perfume Materials

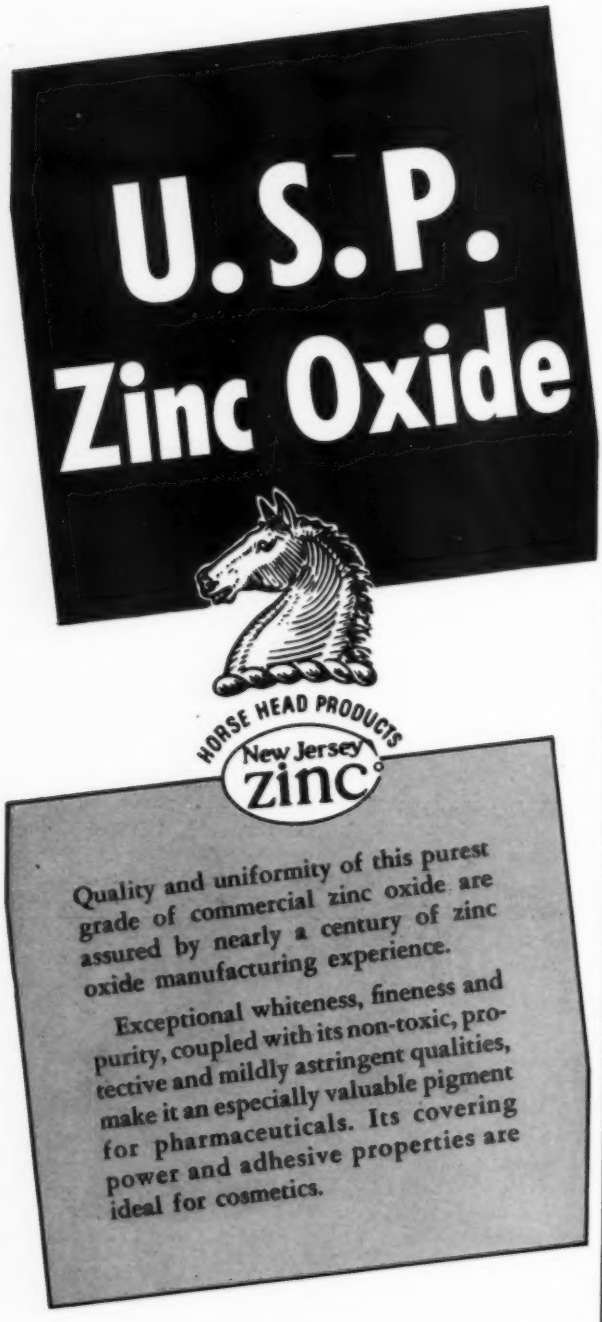
Synthetic aromatics, perfumes, isolates and their derivatives, as made in Germany, are the subject of a recent British report (B.I.O.S. Report, No. 1725). As pointed out in the *Perfumery and Essential Oil Record* (39:156, 1948), no outstanding advances are recorded, but there are several technical hints and devices which will result in increased yields. For example, in this report, the preparation of anisaldehyde (aubepine) from *para*-cresol is described in detail, the *p*-cresol being converted to *p*-cresyl methyl ether and the latter oxidized with a mixture of potassium permanganate and manganous sulphate. Geranyl formate is made by esterifying geraniol with 5 per cent formic acid in the cold. A process is described for the preparation of linalyl acetate in 79 per cent yield by the acetylation of linalol with acetic anhydride, using 1¼ per cent phosphoric acid as catalyst, while terpinyl acetate is made similarly.

The preparation of the ionones and the methyl ionones by condensation of citral and acetone and methyl ethyl ketone is described, as is also the separation of ionone into the α and β isomers by fractional precipitation of the bisulphite compounds.

Benzaldehyde and benzoic acid are prepared from toluene by chlorination to benzyl chloride and benzol chloride respectively, and alkaline hydrolysis of the latter two bodies, using calcium carbonate in the form of marble chips. Benzyl benzoate is made by the disproportionation of benzaldehyde, using the aluminum derivative of benzyl alcohol. Benzyl acetate is made by treating benzyl chloride with sodium acetate; cinnamic aldehyde from benzaldehyde and acetaldehyde, and cinnamic acid from benzaldehyde and acetic anhydride and sodium acetate, all using the standard text-book procedures.

Details are given of the preparation of chlorthymol, and of musk xylol and musk ketone, these following the conventional methods. At the Schering-Kahlbaum plant, thymol and menthol were made according to the following process: *Meta* cresol was first obtained from a mixed cresol mixture by the urea process and condensed with isopropyl alcohol, using an activated earth as condensing agent. The resulting thymol mixture is fractionated, and the thymol converted to menthol by hydrogenation with a nickel catalyst (details for the preparation of which are given). The menthol is purified by converting it to its esters, recrystallized, steam distilled and finally recrystallized.

Borneol is prepared by the action of boric acid on turpentine in the presence of aluminium isopropylate and hydrolysing with sodium carbonate solution. Formerly, oxalic acid was used in place of boric acid, but the process did not give as pure a product. Isobornyl acetate is produced as a by-product. The aluminium isopropylate acts by reason of its hydrolysis to an active alumʼnium hydroxide. Bornyl acetate was made from turpentine by the action of acetic anhydride and acetic acid to give a 46 per cent yield.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Alcohol In Medicine

(*Continued from page 239*)

minutes after it is swallowed.[8]

The great physician, Osler, is generally credited with the remark that, "Alcohol is the milk of old age." With geriatrics becoming a more important phase of modern medicine, it may be noted that alcohol is a useful aid in the feeding of the aged.[29] Alcoholic beverages, like milk punches and eggnogs, are sometimes valuable for convalescents as rapidly assimilable sources of energy. Whiskey or champagne may be the only food tolerated by feverish, restless patients.[8]

Alcoholic beverages have other therapeutic uses worth citing. Sollmann[9] mentions, for example, that alcohol may be a useful adjustant in nervous dyspepsia. The reflex stimulation of alcohol on the mouth, throat and stomach is utilized to treat fainting.[8] Also noteworthy is Howeler's[30] report on the value of alcohol, in the form of wine, as the most effective antidote for cocaine poisoning.

During the last decade or so, parenteral therapy with alcohol has been advocated as a means of alleviating pain and discomfort and providing valuable aid in a variety of disorders. Alcohol by injection has added another valuable weapon to the armamentarium of modern medicine.

About ten years ago, when the parenteral use of alcohol was finding increased utility, Gershenfeld[4] made some interesting observations with regard to the sterility of alcohol. This, of course, is a most important consideration when alcohol or its solutions are given hypodermically. He found that all samples of 95 per cent and absolute alcohol purchased in this country were free of bacteria and their spores. This sterility was in contrast to reports from Europe where the commercial product was found to be contaminated frequently with spore-forming organisms.

Occasionally alcohol is injected subcutaneously or intracutaneously in the affected area to relieve the agonizing itching of pruritus ani.[5] More commonly, alcohol is used in the production of "nerve block," a procedure in which strong alcohol may be injected in or around the nerves or ganglia to obtain prolonged relief from pain. In trigeminal neuralgia, for example, injection of alcohol into the affected nerve will often relieve pain for many months, sometimes for years.[31] Harris[32] found that alcohol injections also gave good results in the majority of patients with migrainous neuralgia, a violent type of migraine. For the management of facial spasm, Gordon[33] stated that the injection of alcohol into the facial nerve is among the most effective methods of treatment.

Paravertebral alcohol injection, a technic which requires considerable knowledge and skill, has proved to be a very valuable measure for securing pain relief in coronary artery disease. Severe cardiac pain is often alleviated by this measure.[21,34,35] Alcohol paravertebral block has likewise proved valuable in Buerger's disease, arteriosclerosis obliterans and other peripheral vascular

diseases. In many persons suffering from arterial insufficiency of the lower extremities, the properly performed injection causes vasodilitation and relief of pain; the effects lasting for a number of months or even years.[24,36,37]

In Italy, alcoholization of intercostal nerves with a similar technic was of great value in treating cases of fracture of the ribs. With this method, the local pain caused by breathing was effectively controlled and the course of the pleuropulmonary complications were favorably influenced.[38]

Sometimes intraspinal injections of alcohol are given to alleviate severe, chronic pain, such as is associated with malignant diseases. The procedure is dangerous, but when successful the relief often lasts for quite a long time.[39,42] In a recent report, for example, Greenhill[43] pointed out that intraspinal injection of alcohol provides a means of obtaining relief from excruciating pelvic pain. Nevertheless, he felt that because this procedure may injure the spinal cord it should be limited to individuals with cancer.

There are a number of indications for the intravenous administration of alcohol. Thus, several reports[44,45,46] show that after the intravenous injection of alcohol, there is an increase in the bactericidal power of the blood. This kind of action has been used to combat various infections. The intravenous administration of alcohol has also proved to be of value in the treatment of alcoholics who were in the restless and ungovernable period of delerium tremens. Injections were used because the patients suffered from irritated stomachs and could not take whiskey by mouth.[45,47] Quite recently, Brown[48] reported that the intravenous administration of an alcoholic solution effectively relieved the severe bronchial asthma in 5 of 6 patients who did not respond to other forms of treatment.

During the last few years attention has been focused on the use of intravenously administered alcohol as an analgesic, as a source of readily utilized energy or as a combination of both. A number of workers[15,49] have found that alcohol produces sedation and analgesia and they have used it for this purpose in conjunction with saline or glucose solution in order to reduce the need for morphine.

When giving alcohol intravenously to combat systemic infection, Behan[45] noted that the patients became quieter and usually intered upon a peaceful slumber. This suggested that alcohol given by this route might be used with benefit as a narcotic, thus taking the place of morphine as a routine postoperative sedative. This effectiveness was demonstrated in a number of cases. It was found that properly diluted alcohol, used intravenously, acted in a phenomenal manner in abolishing pain. It increased the peripheral circulation in patients with diabetic gangrene of the extremities and produced routine postoperative sedation and rest. Such treatment has also given beneficial results to insane and restless individuals, including excited paranoiacs.

Behan's report covers thirty cases. He found that

(*Continued from page 256*)

KOMMON SCENTS!

International aspirations bear out the perseverance of Podunk and Peoria. We haven't succeeded in talking Stalin out of the Veto, but we've at least won over Tito.

•

Naturally, political realism would dictate that we don't sleep with our finger in Tito's mouth, as the saying goes. Any guy behind the Iron Curtain who'd fight Stalin over the Marshall Plan must be pretty hungry.

•

Tito, of course, has been branded by the Cominform as "A Trotskyite." The politically uninitiated should be told what "A Trotskyite" is: A revolutionary crook, liar and fraud, who has the nerve to practice benevolent evil before Stalin does.

•

Biggest laugh in the situation is the "unlimited love" of Stalin professed by both Yugoslav and Russian Communist Parties. There hasn't been so much "unlimited love" since Bigamy. And not half as much illegitimate issue.

•

Future histories of the October Revolution will undoubtedly be subtitled: "The Dialectics of Materialism"—or "Joe's Hectic Love Life."

•

Happiest over the Stalin-Tito rift, is the House Un-American Activities Committee. They finally have found there are Communists other than Russians.

•

And the European falling out proves for certain that Communist parties are independent. If you don't believe it, ask any Soviet firing squad.

•

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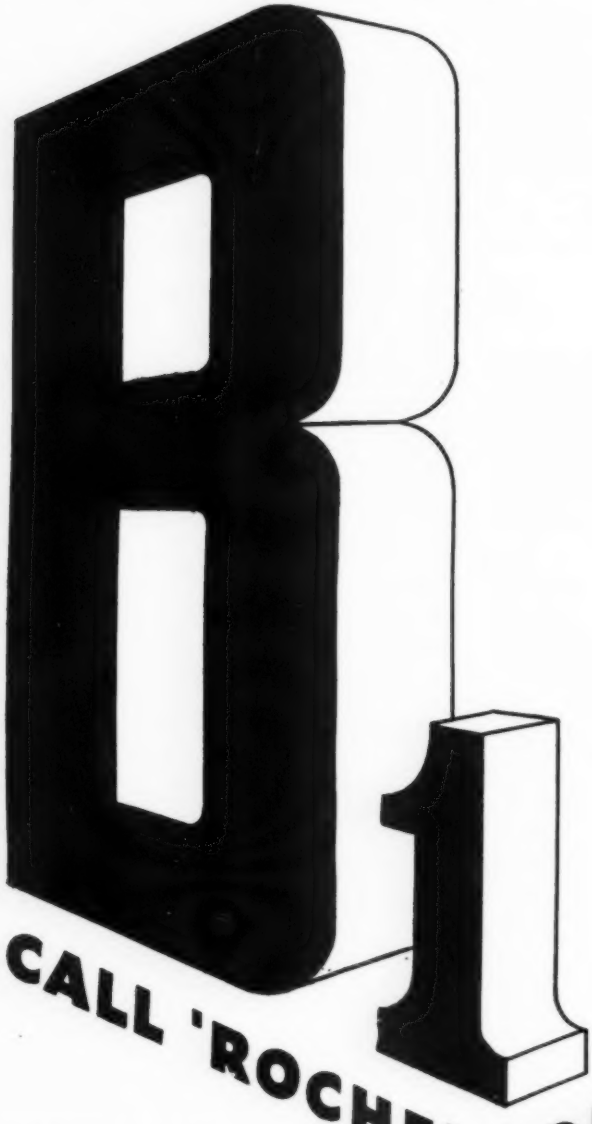

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Abreast of the Markets

Price Stability in Fine Chemical Market Noted. Alcohol Market Easy. Citric Acid Price Up 2½ Cents.

The general market picture in drugs and fine chemicals was one of stability in which prices held relatively stable but demand for many items fell off considerably. Most materials were in better supply, a few exceptions being acetone, the glycols, and a few drugs. Penicillin in all forms was lower. Argols declined $2 per 100 kilos following an advance by the same amount earlier in the month. These price fluctuations were not reflected in the price of tartaric acid or tartrates which held to their firm price position prevailing over recent months. Iron ammonium citrates, both the USP brown granular and the NF green granular, advanced 10c per pound. Supplies were described as adequate and the rise was necessitated by increased manufacturing and material costs, as well as accumulated freight rate increases.

Ethyl alcohol, both pure and denatured, continued to show unsettlement. Other price developments of the period included a fall in menthol and a rise in cocoa butter. Of importance to the supply of bromides and salicylates was the fact that the plant of one producer was struck and the labor trouble tied up production of those materials.

Production of glycerin, absolute basis, during June totaled 16,915,000 pounds, according to figures of the Bureau of the Census of the Department of Commerce. May output of glycerin, absolute basis, was 15,482,000 pounds, official sources reported.

Factory and warehouse stocks of glycerin, not on an absolute basis, totaled 51,885,000 pounds on June 30, which was 2,122,000 pounds above the total on May 31 of 49,763,000 pounds, according to the Census report.

Cod Liver Oil Firm

Though demand was seasonally dull so far as spot requirements were concerned, considerable trading in quantities to be delivered later proved more than sufficient to hold prices relatively strong and to curb the possibility of any early appearance of local competition. The spot position of this item is tied tightly to the strong position developed in the primary markets as the result of the relatively small production this year in Norwegian waters.

Late during the trading period cables from Norway reported an advance in price, setting it at $77 per drum. Large spot holders determined to keep this market unchanged in the interest of stability.

Alcohol Market Unsettled

More than a fair amount of unsettlement prevailed in the alcohol market. The price trend has been downward for some time past and nothing at the moment suggests an early check to the movement in favor of manufacturing consumers.

As regards the situation with respect to consumption of alcohol for industrial purposes, some buyers have a lessened need for the article, a fact that has found some reflection in the continued decline in quotations. Molasses is far lower today than it was around the first of the year, a further weakening element in the alcohol price structure since it reduces production costs in some measure and tends to increase the element of competition between suppliers.

Citric Acid Advanced

Leading producers of citric acid announced a price advance of 2½c per pound in this item and are now quoting: granular and fine granular, USP in barrels at 25½c per lb.; Citric acid, anhydrous, granular and fine granular, in drums 27½c per lb.; powder, in drums, 28c.

Mercurials Firm

While the price of a 76 pound flask of mercury was advanced $2 per flask by the cartel, this was not as yet reflected in the price of spot material which maintained its current level of from $76 to $78. Mercurials were accordingly likewise stable, and this situation was expected to continue because of a generally weak demand and ample supply.

Mercuric iodide was an exceptionally stable item because of the unchanging price position of iodine as well as of mercury, and continued to be sold at $4.17 per pound for the N.F. material packaged in 25 to 100 pound drums.

Red precipitate N.F. held to $2.17 in 50 pound lots with supplies ample and demand quite moderate. The same situation prevailed on U.S.P. yellow mercuric oxide under its firm price structure of $2.44 per pound in 50 pound quantities. Calomel moved in steady but moderate quantities at $1.82 per pound while corrosive sublimate moved in generally better volume industrially at $1.53 per pound in 50 pound lots. Demand for ammoniated mercury was said to be off somewhat due in part to the competition which while precipitate faces in certain fungicidal end uses by the compounds of undecylenic acid.

Penicillin Down

The various forms of penicillin were readily available for prompt shipment in almost any amount, according to reports from major producers. Prices were expected to remain firm at the new and lower level of 10c to 11c per 100,000 units for 1 billion unit bulk lots of calcium amorphous material. Bulk sodium prices on the same basis stood at 12½c. On crystalline sodium penicillin G, wholesaler's prices were maintaining 24c per 100,000 units in bottles, with the 200,000 unit bottle quoted at 43.2c.

Procaine penicillin G crystals in bulk lots of 100,000,000 units was quoted at 13c per 100,000 units, while the price in 10cc. vials of 300,000 units stood at $8 on the wholesale level. There was a reportedly greater interest in the trade in procaine penicillin at the expense of the other types, and more production was shifting in that direction.

New Calcium Lactate Price Schedules

The new price schedule on calcium lactate U.S.P. went into effect July 23, 1948:

200 lbs.	44c a lb.
400 lbs. to 1,800 lbs.	43c "
2,000 lbs. to 4,800 lbs.	41c "
5,000 lbs. to 9,800 lbs.	38c "
10,000 lbs. or more	37c "

• Prices quoted in this section were current on the first of this month.

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Essential Oils Continue Dull and Inactive. Essential Oil Index Declines 6.4 Points.

The essential oil market continued dull and inactive during the period under review. Manufacturing consumers were still disposed to purchase only for requirements actually in sight as their inventories of raw materials covered a substantial number of their items.

A feature of the market was the sharp reductions in prices of Italian lemon and orange oils on spot. In addition to this development there were more favorable consumer quotations on anise, mace, origanum, and tansy oils. In the aromatic chemical sections of the market, anisic aldehyde, benzyl propionate, carvol, ethyl butyrate, eucalyptol, eugenol, and heliotropine were reduced.

Dillweed was one oil that was in very tight position everywhere. Stocks were far from abundant and demand was still strong, with every indication of becoming stronger until the new crop arrives on the market.

Italian Lemon Declines Sharply

The spot market price of Italian lemon oil declined to $2.75 per pound and it was reported that substantial material was available at that level. The local range was to $4 per pound although no sales were reported at such a price. High quality domestic oil was available at $3.10 to $3.60 per pound as to seller and quantity—and since domestic oil cares for about 75 per cent of home requirements it is not likely there will be any takers of Italian oil at the outside figure.

Mint Oils

Reports prepared and released by the Bureau of Agricultural Economics indicate that much old planting of peppermint plants have been destroyed to make way for new settings. Dry weather that came after the new plantings caused the plants to make a poor growth early in the year, but it was felt to be too early accurately to forecast the probable result on the early unfavorable conditions on the ultimate production. Much will depend on the yield of oil per acre. These conditions apparently applied mainly to peppermint in Indiana. Earlier reports regarding the Northwestern situation had been also adverse. The new plantings in Michigan have made fair progress. The fact that there is little spot demand for this oil meant little. Pending marketing of the new srop local activity in practically all years at this season is mainly that of jobbing sort.

Most information offered at this time can be interpreted as favorable to an excellent production of spearmint oil this year. Planting involved a substantial acreage and the growing crops in various sections of the country have made better than fair progress. Local price conditions have in a veiled way foreshadowed this position at primary market points and some tendency to shade has not been restricted to individual sellers only.

Olive Oil Imports Continued Low in 1947

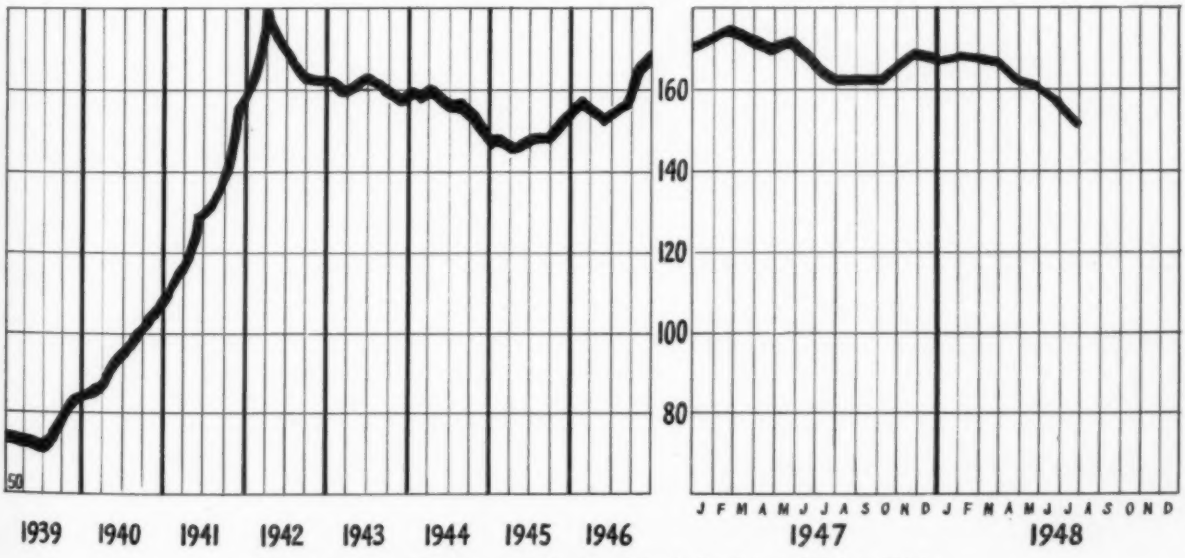
Imports of olive oil continued low in 1947—11,000,000 pounds, nearly all edible, entering this country, compared with the 1937-41 average of 48,000,000 pounds. Including inedible oilve oil, average prewar receipts were 74,000,000 pounds. Spain furnished 4,000,000 pounds last year; Italy, 3,800,000; French Morocco, 2,000,000; and Syria and Greece, smaller quantities. With prospects of substantially larger imports in 1948, olive oil was returned to import control in February. The United States has been allocated 33,000 metric tons (72,800,000 pounds), an amount almost equal to the average quantity received during the 1937-41 period. It has been estimated that 24,000 tons will consist of sulfured oil.

The relatively large allocation of olive oil to the United States was made possible by favorable 1947-48 production which will result in the best export situation in years. Preliminary estimates of Mediterranean Basis production is placed at 1,074,000 short tons, the second largest in 25 years. Output in 1946-47 amounted to 813,000 tons and in 1945-46, 539,000 tons. The IEFC has recommended a distribution of 99,000,000 metric tons in 1948, including the 33,000 tons scheduled for United States importation.

U. S. Oil Imports

Declared exports of essential oils to the United States from the Marseille Consular District, France, in April 1948, were valued at $8,818—a tremendous

50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for July declined from 157.1 to 154.2.

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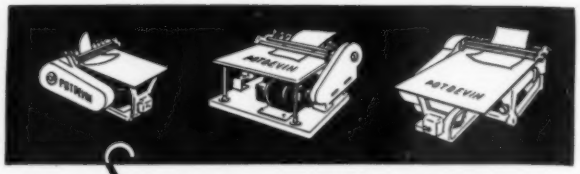

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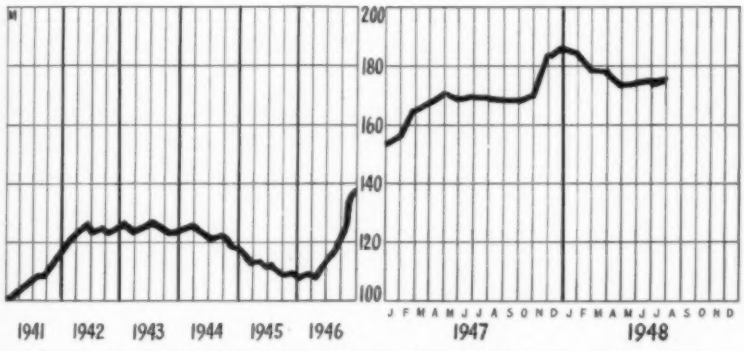
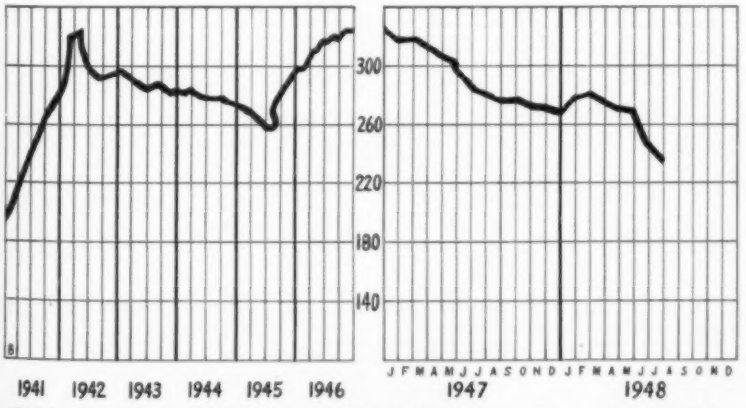
Ginger oil 25c
Heliotropin 5c
Helonias root 23c
Henbane leaves 10c
Henna leaves 3c
Iceland moss 10c
Irish moss 2c
Lemon oil Italian 25c
Licorice root select 5c
Lycopodium 50c
Mace oil, dist. 10c
Manna large 30c
Menthol natural 25c
Nutmeg oil 5c
Nux Vomica Buttons 1c
Orange oil Italian 25c
Origanum oil 5c
Papain pure Powd. 10c
Patchouli Oil 75c
Plantago seed Blond 1c
Psyllium seed Black 3c
Quince Seed 25c
Rhatany root 2c
Rhubarb root HD 5c
Safron 7c
Sarsaparilla root Honduras 5c
  Mexican 5c
Soap bark cut 3c
Tansy oil 75c
Vanilla beans Mex. Cuts $1.25
  Mex. whole 90c
Vetivert oil Java $1
Wahoo bark of root 20c

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinal chemicals index advanced fractionally from 175.1 to 175.8. Citric Acid was higher; menthol declined.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index declined from 246.9 to 235.5. Agar was up; Balsam Tolu, Buchu, Digitalis, Gentian, Licorice, Nux Vomica and Rhubarb were down.

decline from $110,470 in the like month of 1947. The April 1948 total consisted of the following items: Oil of French celery seed, $1,890; oil of coriander, $1,600; sandalwood oil, $1,300; and other oils, $4,028.

French trade circles attribute the sharp drop in value of essential-oil shipments to the diminishing United States demand in face of prohibitive French prices. These sources do not foresee any improvement until France experiences a general reduction in prices.

Declared exports of petitgrain oil from Paraguay to the United States during the first 5 months of 1948 amounted to 65,638 kilograms valued at $348,684, as compared with 24,463 kilograms valued at $126,167 in the like months of 1947.

Camphor

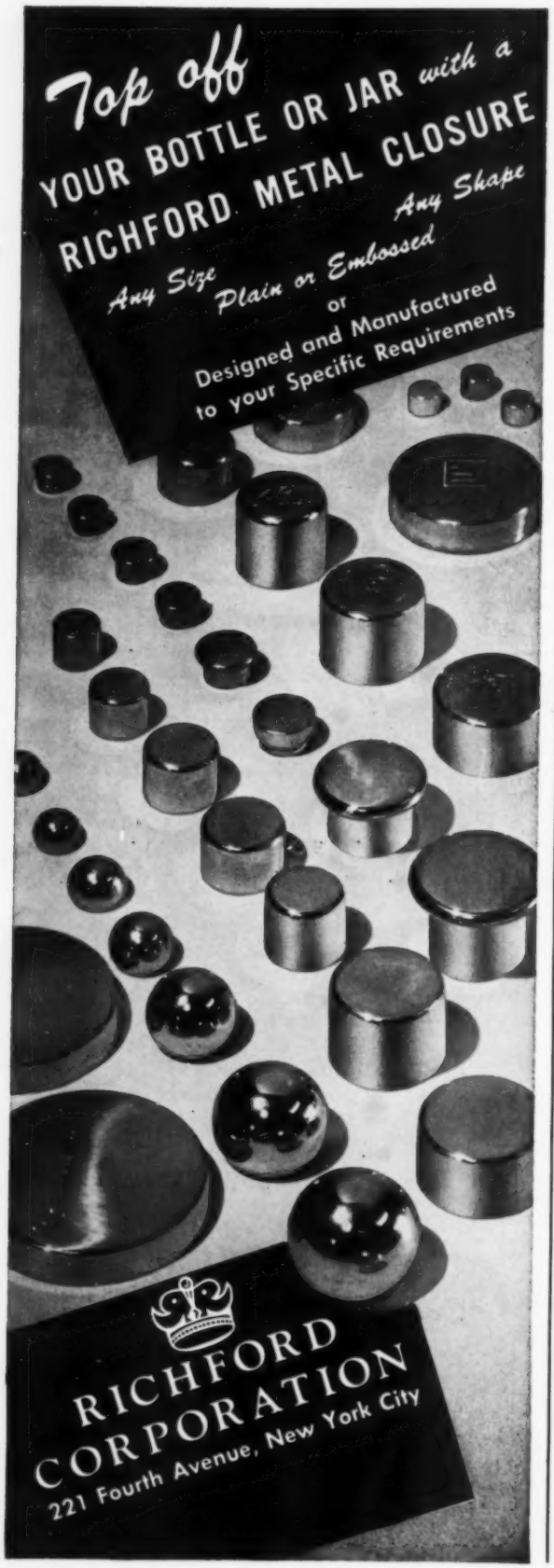
The Chinese Government, through the National Resources Commission, is attempting to rehabilitate the camphor industry of Formosa. Before the war the island supplied 70 per cent of world camphor requirements. None is being produced at present, but the Taiwan Camphor Co. states that a considerable portion of stocks on hand at the time of the Japanese surrender is intact.

Vetiver Oil Down

Bourbon vetiver oil, which had been on the decline for some time, went from $17.50 to $16.50 on the low side of the range, although some sources were still asking as much as $38 for it. The average selling price was somewhere in the neighborhood of $20. Supplies of this material were plentiful, and demand for it was not particularly good.

Lavender Oil Easy

French, lavender flower oil, 30-32 per cent ester came down in price from $2.85 to $2.40 on the New York market. On the high side of the range, however, it was still being quoted at $3.10. Demand for the item was reported to



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still be as strong as it had been during the past several months, and supplies were adequate to accommodate all normal ordering. The 38-42 per cent ester remained unchanged at the previous price range of $4.25 to $10.15, and the Russian was also firm at $11.75. The spike, Spanish, pure showed no change from the previous listing of $1.40 to $2.25 and the technical was still being offered at $1.40 to $2.78.

The readjustment of prices on crude drugs has gone far but as yet there is no indication that the end of the downward spiral is in sight. In the course of setting prices down to new levels there were declines noted in arnica and Hungarian chamomile flowers, as well as on belladonna leaves and root, aletris, buchu, henbane, ergot, and kola nuts.

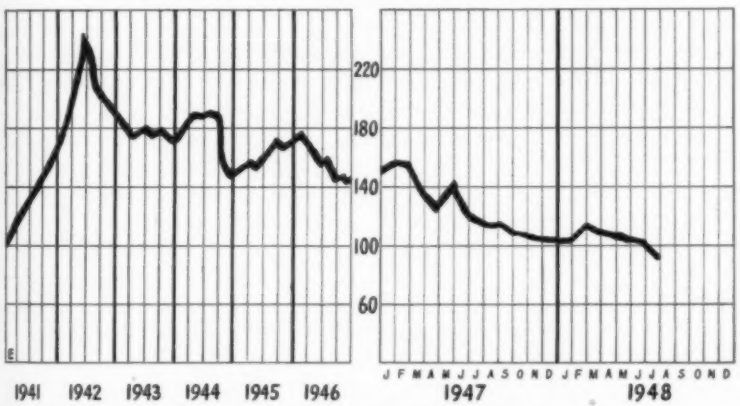
Some factors believed that a crisis in the supply of domestic botanicals was in the making and suggested that manufacturing consumers contract at least a minimum of their 1948 requirements at prevailing prices so that dealers could pay prevailing prices to collectors and in that way encourage production.

The peak of war-time collection in 1944 had been followed by a steady decrease in pounds gathered and in May, 1948, the decrease was 60 per cent of the May, 1944 gatherings. And since May, 1944, prices offered collectors had risen steadily and in May, 1948, they stood 26 per cent higher than the May, 1944, average. Unless something is done to stop the drop in gathering of domestic drugs, a crisis in 1948 supplies seems probable.

Vanilla Declines

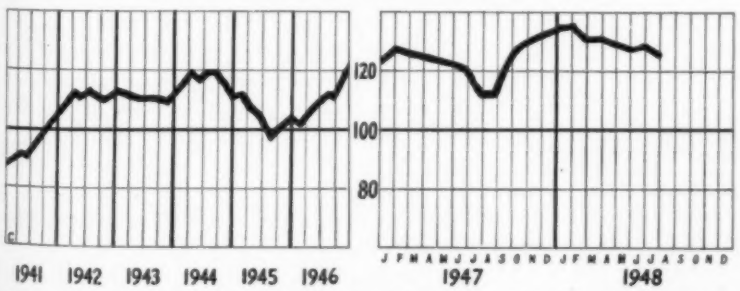
Mexican vanilla beans continued to assume increasing importance on this market and they offered sharp competition in terms of prices to the offerings of Bourbon beans. Whole Mexicans stood at $5.85 to $6.85 per pound, depending on quality and seller, and cuts were noted at $5 to $6 same basis. Bourbon beans held to $7.50 per pound minimum, a price justified by what dealers paid for present stocks and still in line with prices expected to be paid in the French Islands unless the French government adopts a reasonable approach to the quoting of Bourbon beans to the American market.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index declined from 101.0 to 94.6. Anise, Cananga, Lavender, and Italian Lemon were lower.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100



The cosmetic raw materials index declined from 132.3 to 129.7. Balsam Peru, Balsam Tolu, Menthol, and Quince Seed were lower.

Potassium and Sodium Citrate Up

The spot market price of potassium citrate and sodium citrate was upped during late July trading with suppliers now offering at the following schedule:

Potassium Citrate, U.S.P. Granular

Drums, net ea. 250 lbs.	37½c per lb.
Drums, net ea. 100 lbs.	38½c " "
50 lb. drums	39½c " "
25 lb. drums	42½c " "

Potassium Citrate, U.S.P. powder
3c per lb. advance over granular

Sodium Citrate, 8th Rev. Granular

Barrels net ea. 250 lbs.	21½c per lb.
Drums, net ea. 100 lbs.	22½c " "
50 lb. drum	23½c " "
25 lb. drum	26½c " "

Sodium Citrate USP 13th Rev. Granular

Barrels net ea. 250 lbs.	28c per lb.
Drums, net ea. 100 lbs.	29c " "
50 lb. drum	30c " "
25 lb. drum	33c " "

Sodium citrate, U.S.P. 13th Revision, powder ½c per lb. advance over granular.

Botanicals Exports to U. S. From Hong Kong Reported

Declared exports of herbs, leaves, roots and drugs from Hong Kong to the United States during the first four months of 1948 totaled 78,498 pounds, valued at $10,730, according to a recent report from the American Consulate General in that city. Included in the total were the following amounts:

Senna, 31,360, valued at $5,643; ginseng, ten pounds, valued at $1,925; rhubarb, 5,600 pounds, valued at $1,780; sandalwood, sixty-five pounds, valued at $189, and galangal root, 41,463 pounds valued at $1,191. In addition, exports of gum banzoin to the United States during the same period were 2,003 pounds, valued at $3,861, and of agar-agar, 20,183 pounds, valued at $29,457.

Ferric Amonium Citrate Up 10c

The following price schedules on ferric ammonium citrate represent an advance of 10c per pound:

Ferric ammonium citrate USP XIII brown pearls 175 lb. leverpak drum 55c per lb.

Ferric ammonium citrate USP XIII brown scales 125 lb. drum 67c per lb.

Ferric ammonium citrate green NF VIII Pearls 200 lb. drum 55c per lb.

Ferric ammonium citrate green NF VIII scales 125 lb. drum 82c per lb.

Ferric ammonium citrate USP XIII brown powd. 200 lb. drum 66c per lb.

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Alcohol in Medicine

(*Continued from page 247*)

in most instances the postoperative intravenous administration of alcohol can replace the usual doses of morphine or other narcotics. The alcohol employed is the ordinary 95 per cent ethyl alcohol as obtained from the manufacturer. Before injection it is diluted with at least 120 to 240 cc. of saline solution or it may be added to the usual intravenous postoperative glucose, 5 per cent, and saline solution. As a rule, 50 cc. of pure 95 per cent alcohol was added to 1,000 cc. of the glucose-saline solution.

The Russians[50] have used alcohol intravenously to produce anesthesia. They found that alcohol narcosis is a method of choice in certain types of bone surgery. It provides a method which is both cheap and devoid of the defects known in other methods of anesthesia.

In their recent report on the intravenous use of alcohol, Rice and his associates[16] state that alcohol appears to have a beneficial effect upon the motility of the gastrointestinal tract and bladder; reducing the incidence of gas pain and similarly reducing the need for postoperative catheterization. Currently, intravenous alcohol is suggested[12] for use as a sedative and analgesic in the postoperative patient; as a supplement during operative procedures in regional anesthesia; to ease restlessness and pain in debilitated patients, and to provide a utilizable source of energy in cases in which nausea, vomiting and nausea prevail. In this connection it may be noted that 1,000 cc. of an aqueous solution containing 5 per cent alcohol and 5 per cent dextrose provides approximately 600 calories. Salts may be added to such a solution.

Behan[45] noted that the intravenous injection of alcohol affords a ready means of supplying energy to severely debilitated and weakened individuals and to those in sudden asthenic crisis and shock. He cites an instance in which a patient, unable to assimilate nourishment by mouth, was given alcohol, plus aminoacetic acid in proper dilution, in glucose-saline solution. Recovery was rapid following the intravenous injections.

The studies of Rice and his coworkers[16] indicate that complete caloric and essentially complete nutritional requirements can be provided intravenously by the use of solutions containing glucose, amino acids, alcohol, and vitamins. With such a combination it is unnecessary for the sick individual to become debilitated because of insufficient nutrition. In a series of more than 300 operations, the parenteral administration of the mixtures has eliminated starvation periods and obviated the lethargy and exhaustion so often observed after an operation. The chances of the poor surgical risk has been greatly improved by this method of alimentation. This method has been used for supplemental feeding or as the sole source of nutrition.

Commercial solutions are available for intravenous administration to provide postoperative sedation and nutrition. These solutions contain B vitamins, 5 per

cent of dextrose, and 5 or 10 per cent of alcohol in normal saline or distilled water. The quantity of vitamins present is such as to more than meet the metabolic requirements of the dextrose and alcohol.[51]

Before concluding, mention should be made of other uses of alcohol in therapy. Lutier,[52] for example, has used alcohol injections for treating hemorrhoids. He had tried various other sclerosing solutions, but he got best results with alcohol. In Brazil, Smith[53] found that alcoholization of the mesoappendix, following operations for appendicitis, was an effective means of obtaining a painless period after the surgical procedure. Years of observation showed that patients treated with intra-abdominal alcohol lavage recovered more quickly than those not receiving this treatment. Also noteworthy is experimental work on mice in which regression of lymphosarcoma was produced by the intraperitoneal administration of 95 per cent alcohol. This study,[55] supported by the National Cancer Institute, requires much further elaboration before any definite conclusions can be obtained.

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Factors In Research

(*Continued from page 175*)

of the estimated federal total of $625 million. In the recent Department of Labor, Federal Security Agency, and Related Independent Offices Appropriation Bill for the fiscal year 1949, the Appropriations Committee recommended an overall total of $173,230,500 for the U. S. Public Health Service alone. This is an increase of over $50 million over 1948. The Steelman Committee recommended that the government spend $300 million per year in medical research by 1957.

Approximately $50 million is spent annually by the pharmaceutical industry for medical research. One can only conjecture as to how much duplication of effort there will be and how actual saving we could effect by intelligent cooperative efforts between federal agencies and private enterprise.

Let us not be too hasty to condemn as totally bad all types of scientific undertakings which are being proposed by the government; rather, let us consider and recommend the proper channels for government research and insist that the research which is directed by the government receive the same type of reasoning and directive thought that we as individual companies employ in our own work.

Research has been widely advertised and is now almost a fetish—daily the public demands large expenditures for more medical research. It is unfortunate that lay thinking has been led to the supposition that answers may literally be bought for enough money spent for medical research.

Where Cosmetics Are Sold

(*Continued from page 180*)

	Independent Drug	Chain	Dept. Store	Variety	House to House
Indianapolis Toiletries	37.9%	36.9%	16.6%	7.5%	
Cosmetics	12.2	17.	44.8	9.8	14.3%

Still another refinement of shopping habits may be made. It is apparent, in examining the display in retail stores, that over each broad group certain products, whether utility, luxury, gift, etc. are favored by the clientele of these stores as a shopping preference in this kind of store. This may be a question of prestige, fashion, convenience, retail reputation and other factors. We know, as a matter of practical fact, that the retail environment best suited for a product such as a perfume need not be best for a shampoo, which may reach the status of a utility.

A survey by the Woman's Home Companion clarifies this difference in shopping preferences.

	Drug Stores	Dept. Stores	Variety	House to House
Perfume	27	36		3
Face Powder	41	37	11	12
Lipstick	41	39	12	13
Cleansing Cream	42	34	9	15

Hand Lotion	59	25	12	8
Deodorant	61	24	19	6
Liquid Shampoo	69	10	9	10

These figures, i.e., the city panels, may be averaged to get a fairly accurate picture of shopping habits in major markets. There will always be a variation, depending upon the retail ability of any one kind of retailer in a community and on the income average of the community. But we have seen, in the Woman's Home Companion survey, a still further variation is determined by the kind of product.

If we examine any one of these products—lipstick or face powder—for instance, ordinary experience suggests a still further refinement. There are lipsticks marketed exclusively, or dominantly through department stores, there are lipsticks whose distribution rests on a broad basis of the independent drug store and the chain, there are lipsticks that are the exclusive retail franchise of variety chains. And many lipsticks, in their retail sales, cross some of these lines in varying degrees. This same variation in distribution, *and in shopping preference*, exists in some degree, not only for the product, but for the brand.

This looks like a conclusion that all figures on consumer shopping preferences for perfumes and cosmetics by type of store are worthless. So they are. Except as matters of general interest.

The single, predominant factor of most importance in the successful marketing of a perfume or cosmetic is the *pattern of distribution*. This pattern of distribution is the single, most vivid physical evidence of company and product individuality.

This individuality must be enhanced by a compatible package, product quality, price, promotion, advertising and company policy. But in the long run, a product is known by the retail company it keeps.

That is why it is so often futile to speculate about the relative amount of business available in a department store, as compared to the independent druggist or chains, unless there is a specific, clear cut conception of product individuality. With this clear conception of individuality, a definition of the value of each retail type can be made, and can be progressively charted until a fairly clear picture of the limits of distribution for this particular product and the limits for each retail type unfolds.

This pattern of distribution, as an inescapable part of company and product personality, can be best appreciated by an examination of case studies of cosmetic companies. Charles of the Ritz and Mary Chess in its original conception and now in its new distribution plan, distribute exclusively through department stores. Patou and Schiaparelli are found within a narrow range of class, prestige stores. Lentheric and Arden, using a broader base of distribution, including department stores, selected chain and independent drug stores, have expanded this selling field nearly to the limits of a class selected distribution. Shulton and Yardley, occupy a middle distribution position, including class,

improving on nature..

The primary function of all cosmetics is to enhance nature itself—to banish imperfections and build toward beauty. So too, in compounding a new cosmetic product, the manufacturing chemist must take nature's ingredients and improve upon them. His task involves careful selection and skillful blending to develop a desirable product that will assure customer appeal and repeat sales.

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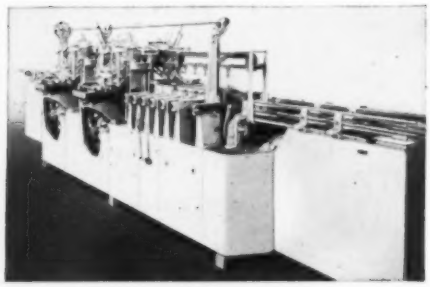
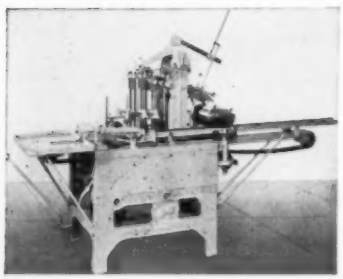


BEE-LINE



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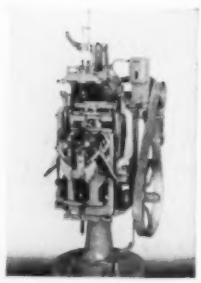

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prestige stores and extending probably to the limits of the number of stores in chains and among the independent druggists who show any capacity for properly displaying and selling a perfume and a cosmetic.

These groups, illustrating in a general way the patterns of distribution and product or company individuality, complete that part of the industry called the class, or prestige lines, or products of selected distribution.

Compare with these companies the marketing problems of Jergens, Colgate, Ponds, Williams, or Mennen. Here the products are distributed in the mass cosmetic market, basically the entire range of the independent druggist, the chains, usually the variety stores and in some cases the super-market. Many of these products are utilities—demand products. The retailers who favor them are not the competent merchants of the department store field or the druggist who has established a prestige position for his perfume and cosmetic department. These products conflict or are in competition to only a minor degree in retail stores. If we are interested in the comparative business of the department store and the drug store, we would find almost an exact reversal between these two groups in these stores.

The variety store, as with the beauty parlor and the barber shop, retail many cosmetic products that are the exclusive franchise of their group. For practically all of these products, if we were to ask the volume of business of the department or drug store, the answer would be none.

We can discover, with fair accuracy the degree of consumer shopping preference for each type of retail outlet. We know from experience or from practical observation that each of these large and different retail groups provide largely separate markets. They are not water-tight compartments because there is overlapping in many cases. But this overlapping is a cycle, expanding from narrow limits of prestige and retail selection to the distribution limits of that way of doing business. The next transition, to mass distribution, is abrupt, nearly non-competitive and concerned almost entirely with new and different retailers.

The question of how much business should be done in the department store, the chain or the independent drug store is the most individualistic question that can be asked in perfume or cosmetic marketing. The answer is really: what part of the industry are you associating with and how far has your business developed in building product and company prestige and in winning consumer acceptance. Or, what kind of a person are you, how well are you known.

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Factors in Research

Facial Make-Up Part I

(*Continued from page 171*)

sium carbonate, but to them were added several other materials which made it possible for an emulsion to form at the surface of the cake with gentle trituration with a moistened applicator. The emulsion formed was quite unstable, by intent, but served as a means of incorporating the powders, emulsifier and other added materials into an homogeneous system, which was then applied to the face. Because it was a moist film, application of a homogeneous film was easily possible, since due precaution in formulation was taken to allow a slow enough drying rate to take place so that a proper period of time for application became possible. In order to introduce the water repellent function removed with the zinc stearate, mineral oil was introduced, which served this function very well, while the water evaporation rate was controlled by the introduction of a humectant such as glycerol or propylene glycol.

The powder formulation also had to be necessarily changed. The percentage of opacifier had to be increased as a compensation for the thinner film made possible by this new means of application. The cake make up then became what was essentially a face powder with the water repellent component removed and replaced by another which was more easily adjustable to the new formulation. A humectant was also introduced as a means of assuring a proper drying rate, while the formation of the system was made possible by the inclusion of an emulsifying agent. The entire mass which was essentially a dry cream with pigments and filler incorporated was then ground and pressed into their containers and was ready for emulsion formation by the incorporation of water from a moist applicator.

There were many different types of cake make up preparations on the market, but they all essentially followed the pattern outlined above. Variations were made possible by the ratio of humectant, powder, oil and also by the amount and type of emulsifying agent used. A good rule was to use the minimum amount of emulsifying agent possible to allow an easy "pick-up" of the film during trituration, since it was necessary to overcome the hydrophyllic property of the dried film by the opposite tendency of the water repellent mineral oil. In its formulation due regard had to be paid to the relationship these three components had toward each other. The thickness of the film was further controlled by the ratio powder, oil + humectant, since the greater the amount of powder, everything else being equal, the greater would be the thickness of the dried film. Actually, in most of the preparations on the market, the powders consisted of about 70 per cent of the entire formula, while the oil + humectant were about equally divided, with the emulsifier consisting of somewhat less than 1 per cent depending on which substance was used.

There are a large number of materials available as emulsifiers for cake make ups, including the usual soaps, non ionic detergents and sulfated alcohols as well as

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the auxiliary emulsifiers as exemplified by glyceryl monostearate and others. Their choice was dependent on the exact function desired in conjunction with the other materials used. For the ultimate success of the finished product, it was essential in any case to be sure that there was a large enough percentage of oil present to effectively cause the dried film to shed moisture, due to perspiration or rain, so that the film would be able to stay in place during the course of the day.

Control of Drug Exports

(Continued from page 179)

But just the same, the doctors on the Committee on Scope of the U. S. P., as well as others in control of things medical and pharmaceutical in this country, are altogether too apt to look down their noses at these foreign countries regarding the drugs and medicinal preparations which they desire and which they find highly efficacious. And now the point has arisen at which those who ship to these countries the drugs or preparations which they desire, packaged and labeled as these countries desire them, are called "unscrupulous," and statements are irresponsibly made in the highest circles to the effect that our laws should be changed so as to prevent us from supplying these countries with the products which they need and desire.

We can visualize, that under proper circumstances, the World Health Organization might accomplish much good. But the representatives from the United States should not attempt to insist that this country is the only one which knows anything, and that drugs recognized by the Committee on Scope of the U. S. Pharmacopoeia are the only ones which should be used. Certainly this nation has no corner on scientific brains, and certainly the medical profession of this country knows comparatively little regarding the health and medical conditions in various parts of the world, even though some of our professional men have made inspection trips which revealed only the better part of conditions which the foreign authorities cared to show them. Perhaps the operation of the World Medical Organization will make the members of the medical profession of this country conscious as to how little they really know regarding the treatment of ailments in foreign countries under the conditions of climate, sanitation, availability of doctors, hospitals, and other equipment that exist there, and under the economic conditions with which these countries are faced.

Furthermore, we sincerely hope that responsible officials in this country will cease stating the fallacy that our laws are inadequate to the extent that there are no means at hand of preventing shipments to foreign countries of goods which are undesirable. As we mentioned before, there may be unscrupulous exporters, but if foreign countries complain about the drugs which they receive from this country, it is not the fault of the law, but it is definitely lack of enforcement of the law as it was enacted. Furthermore, there is no lack of

enforcement regarding goods shipped in interstate commerce in the United States itself, so we are at a loss to explain why this rigid enforcement does not extend to goods leaving our shores for foreign countries.

Albert A. Teeter

(Continued from page 181)

It was not until 1928, after he had been promoted "upstairs" at 81 Maiden Lane, with the added responsibilities that his promotion imposed, that he decided to incorporate cameras into his formidable program. Never known to do anything by halves, Bert threw himself headlong into the photographic arena. With the same zeal that attended his other activities, he proceeded to surround himself with the finest cameras made. He furnished a dark-room with the most elaborate apparatus, and then began to perfect methods of developing and printing that were astounding in their results. Bert's pictures have been exhibited all over the world, as studies of art and technique. He has supplied photographs to the British Admiralty, the United States Admiralty and to the Intelligence Department of Military Objectives.

When Bert took over the buying of tartars for the company, occasional trips to Europe became necessary for his study of the markets there. He travelled heavy . . . never without four or five cameras among his effects. A tough time he had crossing borders with them on his last trip, too. That was just before the war broke out, and Hitler's muscle-men were inclined to look down their noses at Americans with photographic leanings. Finally, with characteristic resilience, he won the courtesy of the port through Italy's Minister of Finance, through Alexander Croccolo, who later was shot by Mussolini's order . . . probably on other counts.

Bert's favorite photographic subject has been his daughter, Ann, who has modelled for him since she was born, fourteen years ago. Pattern shots of flowers, insects, butterflies, and birds represent an artistic and interesting part of his collection of pictures. His colored chauffeur, Josh Johnson, who was an integral part of Bert's domain for thirteen or fourteen years up until the time of the war, provided material for his more amusing studies. For many years, Bert has been a member and an associate of the Royal Photographic Society of Great Britain, which is no kamera klub for novices.

Meanwhile, as his sons reached the ages of reason, or better, Bert siezed the opportunity to economize on his own time, and at the same time to expose them to one of the elements of sociability. He resigned from his position as household bar tender, and introduced to them the intricacies of mixing drinks in the grand manner. All ingredients were measured in graduates, and the boys became as accomplished as the demand warranted.

Of infinitely greater importance, Bert injected into the boy's training a sense of value for an avocational interest . . . the recreational advantage of manual skill.

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Albert and John both are enthusiastic whittlers, Albert, of pipes, and John, of model boats.

During all this time, Pfizer hadn't been at a standstill, exactly . . . nor Bert's position there. The company had expanded from the manufacturing of straight line chemicals to the fermentation field and antibiotics, the number of their employees from five hundred to twenty-five hundred, and sales from four millions to forty millions. Bert had been promoted from a salesman for the firm to secretary, to treasurer, to vice-president and a member of its board. His office, he remarks, has been his second home, and his associates there, his other family.

In 1942, Bert changed his place of residence to Rumson, New Jersey, from Elizabeth, where he had made his home since his marriage. The newer estate consists of about six acres of ground. He has been able to expand his laboratories, dark-rooms and work-shops without his family finding it necessary to hang from the ceilings. He did not stop with these improvements, however. Looking over his expanse of terrain, he became obsessed with an idea for a new hobby. This time he decided to turn his unfailing hand to the raising of game. An experiment in the breeding of pheasants led to another successful and absorbing venture. He now presides over a settlement of aviaries housing four or five hundred canaries, parakeets, finches, cardinals, Java rice birds, siskins and doves.

The only trouble Bert has with his feathered kindgom arises from female fanciers who own lone canaries. These bird lovers pluck his sleeve because his aviaries are not equipped with central heating. They are not impressed by the fact that their pets die, and his live from generation to generation. He has lost only one bird, and that was a blue pheasant that died of a sunstroke.

This combination of business-man, artist, and scientist incorporated his talents and his perseverance and learned to play the organ a few years ago. His wife played, and his daughter was being instructed, and there it was, so he decided to have a whack at it. In six lessons he had learned the chord construction and the manipulation of the stops. He confesses that he is no organist but he enjoys the sound of his own music.

Bert derives the utmost of pleasure from his home and his business associations. He has no patience with vacations from them because he finds it impractical to drag them and everything he owns along with him. If he feels the urge to go surf casting, the ocean is only two minutes from his home. The golf club is only a short distance away. What would *he* do with a vacation?

A member of the Drug and Chemical Club, he served on the Board of Governors and was Treasurer for seven years. Also, he is a member of the New York Chamber of Commerce and of the Salesmen's Association of the American Chemical Industry. The rest of his spare time he shares among the Rumson Country Club, the Seabright Beach Club, the Monmouth Beach Club and The twenty Knotty Pines . . . and the guy will probably live to be a hundred!

Fifty Million Dollars Can Be Wrong

(*Continued from page 167*)

running into many millions of dollars, is again proof that in America perfume represents a pinnacle in exclusive preciousness. This quality, as a major inherent factor in perfume demand, has certainly played an essential part in building perfume sales in America. This value has been obvious during the entire period where perfume education was operating and expanding sales in that narrow layer of population of substantially better-than-average income families.

But we have now arrived at the time when two questions may be asked. The first question is: have we so educated the well-to-to American women in a belief in the preciousness of perfume that she uses it with great discretion and very sparingly, and also so that she uses it only at a time when there is some very special social occasion? As a corallary to this, have we built up in the mind of a man that perfume represents something so very special that it is only suitable for a gift on very intimate and special occasions?

The other question is: has this precious quality of perfume discouraged many millions of women living in very ordinary environments from thinking that perfume, which is so rare and precious, is suitable for them? In other words, all of this may be summed up in the question, has the perfume industry succeeded too well in establishing the idea that perfume is so rare and precious that it must be kept and treasured rather than used.

The second basic promotional activity of the industry, which reached almost a unanimous and, as some people think, obnoxious peak during the war, is the sex appeal. Looking back through the stream of war time advertising and through the long list of names created for new perfumes during this period, it does seem there was a predominant opinion among perfume manufacturers that the primary, if not the only, reason why a woman would use a perfume was to attract the opposite sex in a way that could hardly be called platonic. There can be no argument but that this theme is a fundamental and important one in the promotion and use of perfume, but it is certainly open to question as to whether this is the only theme, and it should certainly be investigated to find out even if it is the predominant one.

Perfume manufacturers can point to a number of startling successes in which this theme played a predominant part. One very prominent perfume, which started a few years before the war and advanced with giddy and rapid strides, has used almost continually the one single advertising illustration which has become famous for its vivid portrayal of sexual excitement. It is said that this perfume had its original start in a whispering campaign, which was started among salesgirls, stating that this perfume was barred from Paris by the German Army of Occupation because the use of the perfume by French ladies was causing too much interference with the German soldiers' stern sense of duty.

On the other hand, the really sustained successes in

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the perfume business, that is the great odors which have stood the test of time, have very largely shown an aversion to this theme.

With the exception of make-up products, the perfume industry, at least in this country, has been the cosmetic product most closely allied with fashion. Fashion itself is a highly intangible idea, and as Elizabeth Hawes gave title to her book, "Fashion is Spinach."

Nevertheless, this association with fashion has brought perfume into a somewhat closer alliance with clothing, and it would be interesting to observe the basic reasons which influence a woman in the purchase of hats, dresses and shoes, and the inner sources of personal satisfaction which she receives from her apparel.

It is said that the attitude of the European woman toward perfume, while it is certainly composed of such ingredients as a feeling of precious exclusiveness and of sex, is that it is predominantly as a source of personal satisfaction that she uses perfume.

The industry must continually come back to the total market of 38,000,000 women in the age groups which largely purchase cosmetics and fragrances. This may be reduced to the 35,000,000 women, who are daily using lipsticks and who may for economic and social reasons comprise the maximum total market available for the consumption of a fragrance.

It may well turn out that the perfume manufacturers, in their critical survey and in their effort to reach the maximum American market, will find that the theme of preciousness has very largely served its purpose, and that, except for a limited group of companies that will prefer to operate within this very restricted circle, this theme while not being abandoned, must be toned down so that a much larger group of American women will feel no extravagant inhibitions to the daily use of a fragrance. It may, also, be that they will find that the sex theme, while still retaining under-lying potency, and while still providing an outlet for a limited number of companies, may profitably be subdued so that the emphasis on perfume use can be turned somewhat in the direction of the appeal which apparel makes, and that is the personal satisfaction that can be derived from the constant use of a fragrance that has great individual appeal.

The perfume manufacturers, who are joined in this group for critical investigation, have certainly taken a supremely intelligent and liberal forward step. Whatever the results will be, they will certainly have a clearer conception of their own business and a much clearer map on which to chart their future course in policy, advertising and promotion.

Deodorants & Anti-Perspirants

(Continued from page 177)

It was brought forth from the experimental data and results of the Good Housekeeping Bureau Laboratory that the pH values of the antiperspirants seemed to have no relationship with the amount of fabric damage.

This conclusion was also made from this present investigation. The pH values of the various preparations were very close and did not vary with the amount of destruction incurred by the antiperspirants.

Solutions were made of the cream preparations and each solution and a portion of the liquid preparation were tested with Gunsberg's reagent for the presence of free hydrochloric acid. As can be seen from the results given in table 3b, all samples gave positive tests with the liquid antiperspirant giving the strongest test. This strong test for free hydrochloric acid given by the liquid antiperspirant may be one of the explanations as to why liquid antiperspirants have been found to be extremely destructive to cloth.

TABLE 5

pH Values of Antiperspirants as Purchased

sample	*pH taken directly on compound*
A	2.5
B	2.3
C	2.3
E	2.8
F	2.2
G	2.5

TABLE 6

Test With Gunsberg's Reagent for Free Hydrochloric Acid Upon Antiperspirant As Purchased

sample	*test 1*	*test 2*
A	pink	pink
B	pink	pink
C	pink	pink
E	pink	pink
F	pink	pink
G	red	red

Note: The formation of a red coloring constitutes a positive test. A negative test is noted by the absence of color.

Another set of experiments was performed to see if the antiperspirants would aid, retard or have no effect on the growth of common bacteria. It was seen, after 1, 2, 3, and 4 week periods, that the bacteria grew normally and thus, that the antiperspirant seemed to have no effect on bacterial growth. (See table 7).

A small acceleration of bacterial growth was noted with sample C, but no definite conclusion can be logically drawn from this bit of data. The sample C may have been contaminated during its manufacturing or packing periods.

It would be interesting to repeat these tests using various other common bacteria. A standard procedure should be adopted for this experiment. Laboratory conditions, as temperature and humidity, should be controlled as closely as possible and the element of time certainly plays an important role also in these tests.

TABLE 7

Growth of Bacteria on Deodorant Cream

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type	and Bacteria	A	B	C	E	F
1. Dab	Nutrient agar bacteria lactis innoculated	—— normal growth ——				
2. Dab	Potato agar bacteria lactis exposed	—— normal growth ——				
3. Dab	Potato agar bacteria lactis innoculated	—— normal growth ——				
4. Spot	Potato agar bacteria lactis innoculated	—— normal growth ——				
5. Spot	Potato agar bacteria escherichia colli	—— normal growth ——				
6. Spot	As above	—— normal growth ——				

Note: Dab plate: small amount of cream is used and a sample of the bacteria is added.

Spot plate: merely rub cream on the plate. Bacteria is not added directly to cream but is placed in the center of the plate.

1) Bien, Ruth R., "The Action of Antiperspirant Creams on Fabrics," (Good Housekeeping Bureau Laboratory, Reprinted from *Proceedings of the Sci. Sec. of the Toil. Goods Assoc. No. 4 (Dec. 6, 1945)*.
(2) Bien, Ruth R., "Antiperspirants" Good Housekeeping Bureau Laboratory, *J. Soc. of Cos. Chem.* (July, 1947).

Viburnum

(*Continued from page 109*)

Even as late as 1928 the bark of *Viburnum cassinoides* was widely substituted for Black Haw, and even this substitute was sophisticated with black choke cherry (*Aronia melanocarpa*, var, *grandifolia*).

Unfortunately, these findings, based on improperly identified material, found their way into the standard texts, and have been repeated year after year without critical evaluation. Despite these adversities, however, the fact remains that the empirical use of the Viburnums continued, and several clinicians, reported good results with the drug in painful menstruation.

A resin of glucosidal nature was reported in several species by various authors but was not isolated or identified. Fatty acids, particularly valeric and isovaleric, were found.

Working with material identified by Youngken, Munch began what was probably the first pharmacological evaluation of authentic Viburnum. He found that authentic *Viburnum opulus* and *Viburnum Prunifolium* showed effective sedative actions on uterine tissues of humans, either isolated or *in situ*, and in isolated tissues of dogs, cats, rats, rabbits and guinea pigs.

By a modified oxytocic method of U.S.P. XI for the bioassay of solution of posterior pituitary, Munch reported that 1 gram of Viburnum was equivalent to and antagonized the effect of not less than 10 gamma of standard posterior pituitary. In evaluating quantitatively the depressor action of Viburnum on the blood pressure of anesthetized dogs against epinephrine

reference standard, Munch reported 1 gram of Viburnum to be the equivalent of not less than 10 gamma of epinephrine reference standard.

Again using a modification of the U.S.P. XII method for posterior pituitary, Munch just recently bioassayed a large number of commercial *Viburnum prunifolium* barks and powdered extracts against papaverine hydrochloride. Considerable improvement in the potency of the barks was noted over those tested in the past. However, there was no consistent relationship in potency between the bark and the powdered extract therefrom, indicating room for improvement in the preparation of the latter. As a tentative standard, Munch states that 1 Gm. of *Viburnum prunifolium* bark should correspond in relative potency to 500 gamma of papaverine hydrochloride, and 1 Gm. powdered extract to 2000 gamma.

Grote and Colburn in 1940, in view of the possible relations of the volatile acids of Viburnum to the physiological action, compared the amount of these in the stem and root barks of *Viburnum prunifolium*. It was found that the root bark contained twenty per cent more total volatile acids than the stem bark, but the proportion and kinds of acids were practically the same in both. The conclusions made at that time were that if the amounts in proportion of the mixture of volatile acids are any measure of activity, the stem bark should also be made official. This and the work of Munch and Youngken led to the acceptance of the stem bark in the N. F. VII. Holbert has recently found that the major portion of these acids was isovaleric acid.

Some work has been conducted on the uterine principles from *Viburnum opulus*. In 1943, Costello and Lynn submitted the bark to chemical separation in order to trace compounds that have depressant action on the uterus. Marked sedative actions on excised and intact uteri were obtained from the dealocholized extract, the amyl alcohol extract of the water soluble constituents, and the filtrate from precipitating the aqueous solution with lead acetate. A beta-glycosidase was found present in the bark, indicating the presence of a glycoside. The volatile oil was found to contain more than fifty per cent of acids, apparently containing from two to ten carbon atoms, as well as esters, phenols, and aldehydes or ketones. Both the oil and the acids were markedly depressant to uterine tissue. Oils having uterine depressant activity were also obtained from the barks of *Viburnum prunifolium* and *Viburnum alnifolium*.

It has been suggested therefore that a uterine sedative for use in dysmenorrhea should contain an anti-pitressin factor. This is interesting in that the earlier assay procedure for Viburnum activity worked out by Munch, used the anti-pituitrin effect of the drug as measured on the guinea pig uterus. In conclusion, it would seem that the essence of the controversy as to the uterine sedative action of the Viburnums can be settled only by use of authentic drug material and a pharmacological program which must be checked and augmented by extensive clinical tests. The woman has the pains and not the scientist.

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